1. Agenda

   Documents: 2015-03 AGENDA .PDF

2. Packet (No Plans)

   Documents: MEETING PACKET WITHOUT PLANS.PDF

3. Plans

   Documents: MEETING PACKET.PDF

Agenda
Planning Commission
Council Chambers
Wednesday, March 18, 2015 - 7:00 P.M.

I. Call to Order

II. Roll Call

Roderick Johnson, Chair	P	A
Cheryl Zuellig, Vice Chair	P	A
Anthony Bedogne	P	A
Phil Hollifield	P	A
Heidi Jugenitz	P	A
Nicki Sandberg	P	A
Scott Straley	P	A

III. Approval of Minutes

- Feb 18, 2015

IV. Audience Participation

Open for general public comment to Planning Commission on items for which a public hearing is not scheduled.

V. Presentations and Public Hearing Items

- Planned Unit Development – Water Street Flats (BW)
- Nonconforming use ordinance revision (BW)

VI. New Business

- Capital Improvements Review – Water Street Infrastructure (BW)
- Engineering Standards (OHM)

VII. Old Business

- Angled Lot Line memo (BRI/BW)

VIII. Future Business Discussion / Updates

- Annual report update
- April meeting – 6:30!

IX. Committee Reports

- Non-motorized Committee

X. Adjournment

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PLANNING COMMISSION
MEETING MINUTES
February18, 2015
CITY COUNCIL CHAMBER
7:00 P.M.

I. CALL TO ORDER

The meeting was called to order at 7:00 p.m.

II. ROLL CALL

Present: R. Johnson, C. Zuellig, H. Jugenitz, A. Bedogne, P. Hollifield, S. Straley, N. Sandberg

Absent: H. Jugenitz (excused)

Staff: Bonnie Wessler, Planner II
Nan Schuette, Executive Secretary

III. APPROVAL OF MINUTES

Commissioner Sandberg moved to approve the minutes of January 21, 2015 as read (Support: P. Hollifield) and the motion carried unanimously.

IV. AUDIENCE PARTICIPATION

None

V. PRESENTATIONS AND PUBLIC HEARING ITEMS

None

VI. NEW BUSINESS

1. Planning Commission "practice" site plan review and discussion

A brief presentation was made by Ms. Wessler who stated that this "practice" site plan was completed by one of our consultants. Some of the same issues that were discussed at the

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January "practice" review meeting need clarification, precedent or ordinance amendments, i.e. Angled lot lines, Frontage Build-out, private Frontages "permitted" vs "preferred" language, Circulation standards, Parking requirements, Parking plantings, Traffic visibility, Greenbelts, Foundation landscaping and Landscape elements.

Ms. Wessler reviewed each of these items and referred to the mock review and also the templates of the site plan checklist she had created explaining the differences going forward on information that would be included for each specific site plan review and special use. Input and comment was provided by commission members.

New copies of the zoning ordinance will be ready for delivery to the Planning Commissioners the end of February. Chairman Johnson asked the next step for commission members, to which Ms. Wessler responded that all that is required is general acceptance and approval of the template by commissioners.

VII. OLD BUSINESS

1. Disposition Policy

Commissioner Zuellig moved to approve the Disposition Policy as listed in the Planning Department Staff Report dated February 13, 2015 (Support: N,. Sandberg) and the motion carried unanimously.

VIII. FUTURE BUSINESS DISCUSSION/UPDATES

1. Annual report update

A copy of the Annual Report was included, listing number of meetings held and total number of actions taken. The total number of items that had been taken included 11 site plans, 5 special use plans and two Planned Unit Developments. The commission also undertook an overhaul of the City's zoning code, implementing one step of the Master Plan adopted in 2013. Regular business included Reimagine Washtenaw (the right-of-way study for the corridor), which is near completion. Three committees were active during the year:

- The Non-Motorized Committee met monthly and has representation from the DDA and Recreation Commission in addition to Planning Commission although attendance is very up and down.
- The Annual Report committee began work to incorporate the goals and objectives of the Shape Ypsi Master Plan into the annual report.
- The Capital Improvements Plan Committee.

Ms. Wessler stated that it is her opinion that one more meeting should be held with the Annual Report Committee in March to finalize the report.

2. Change date/time for April meeting

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Ms. Wessler asked board about the possibility of changing the April Planning Meeting to April 22nd instead of the regularly held meeting on the third week of April. She explained that the reason for the change is a class who are working on a small neighborhood plan who would like to present it to the commission and that is the only date that they would be available. Ms. Wessler will confirm the date to ensure that it is set in stone and come back in March but in the meantime, she asked that the commission hold that date in April until she gets a confirmation.

3. Next month's meeting will include a Planned Unit Development
4. Capital Improvement Plan
5. Engineering Standards for review and approval
6. Potential revisions to the non-conforming part of the ordinance

IX. COMMITTEE REPORTS

Non-Motorized Committee - The Planning Department has acquired a unpaid intern to work on an update for the five-year non-motorized transportation plan. Staff has made quite a bit of progress since the 2010 edition, including gathering quite a bit of data. Because of the progress, this data, and the recent master plan update, we anticipate that this plan will be more focused on infrastructure and mapping than the 2010 edition.

X. ADJOURNMENT

Since there was no further business, Commissioner Hollifield moved to adjourn the meeting (Support: A. Bedogne). The meeting adjourned at 7:50 p.m.

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City of Ypsilanti

Community & Economic Development Department

13 March 2015

Staff Review of Planned Unit Development (PUD)
Water Street Flats
300 South River Street

GENERAL INFORMATION

Applicant:	Mike Rodriguez Herman & Kittle Properties, Inc 500 East 96th St, Ste 300 Indianapolis, IN 46240
Project:	Water Street Flats
Application Date:	18 Feb 2015
Location:	Block formed by the proposed South River, South, Lincoln, and Gilbert Streets in the Water Street Redevelopment Area.
Zoning:	C, Center; Limited building types permitted include TH, AB, CA.
Action Requested:	Site plan approval; rezoning to PUD
Staff Recommendation:	Approval with conditions

PROJECT AND SITE DESCRIPTION

The applicant is proposing to construct a four story apartment building with a ~28,295 sf footprint, containing 80 units, on a 74,069 sf / 1.7 acre lot, with associated parking, landscaping, and other site improvements. The applicant is also proposing to construct South River Street, a portion of Park, a portion of Gilbert, and a portion of Lincoln Streets, and associated right-of-way improvements, to be dedicated to the City at the completion of the project. Multiple Family Dwellings are a Permitted Use in the C-Center district.

Figure 1: Subject Site Location & Zoning

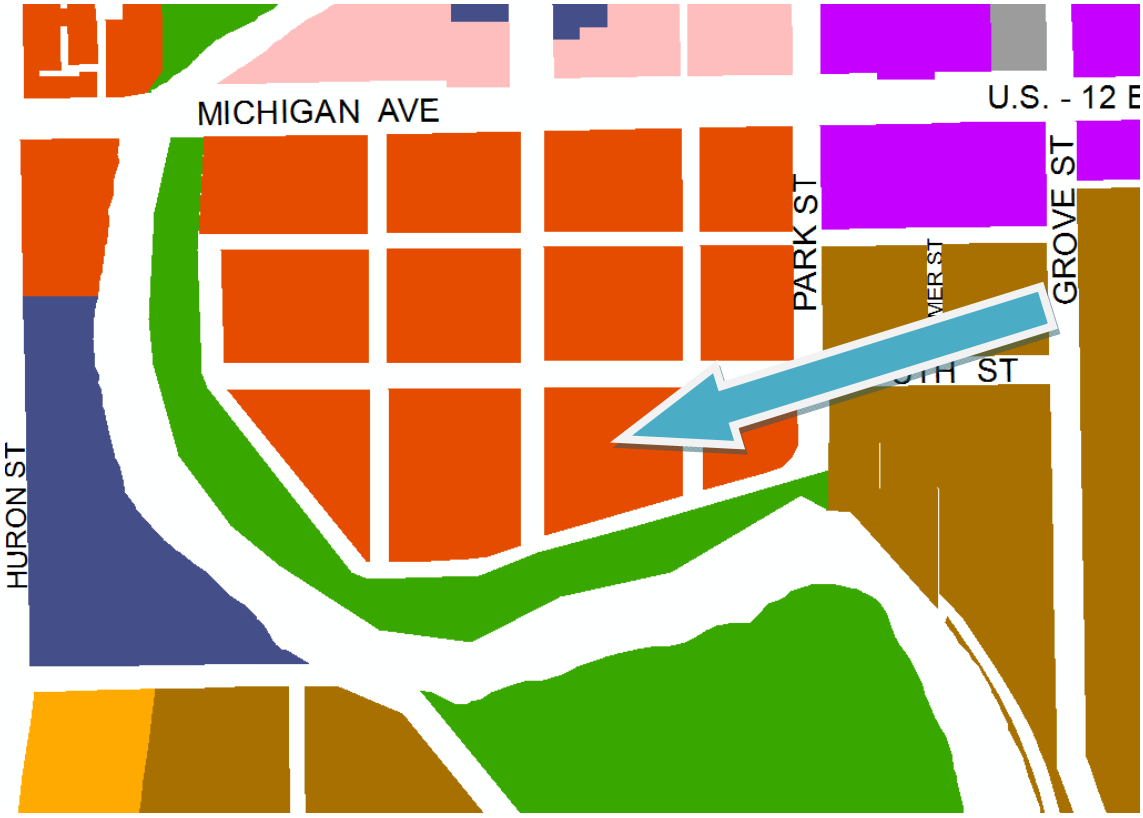

Figure 2: Land Use and Zoning of Surrounding Area

	LAND USE	ZONING
NORTH	Vacant	C-Center. Limited Building Type: TH, AB, CA
EAST	Vacant	C-Center. Limited Building Type: TH, AB, CA
SOUTH	River's Edge Park; Huron River, Waterworks Park	P-Park
WEST	Vacant	C-Center. Limited Building Type: TH, AB, CA

PUD: REQUIREMENTS §122-573

(1) ***Unified Control.*** *The proposed development shall be under single ownership or control such that there is a single person or entity having responsibility for completing the project in conformity with this Ordinance.*
COMMENTS: Herman & Kittle Properties, Inc. (HKP) has a purchase agreement with the City of Ypsilanti for the entirety of the site under consideration.

(2) ***Minimum Size.*** *The minimum size of a Planned Unit Development shall be forty-three thousand, five hundred sixty (43,560) square feet (one acre) of contiguous land or 21,870 sf (1/2 half acre) if the proposal involves the preservation and/or adaptive reuse of a historically significant structure. The historical significance shall be determined by the city historic district commission.*
COMMENTS: The development area is 1.7 acres. Additional infrastructure will be constructed by HKP. This is not an adaptive reuse project.

(3) ***Applicable Base Regulations.*** *Unless waived or modified in accordance with the procedures and standards set forth in this Article, the yard, bulk, parking, loading, landscaping, lighting, general provisions, and all other standards set forth in the Zoning Ordinances for the uses listed below shall be applicable for uses proposed as part of a Planned Unit Development:*
   a. *Multiple-family residential uses must comply with the regulations applicable in the MD, Multiple Dwelling Residential, district.*
   e. *To encourage flexibility and creativity in development consistent with the planned Development concept, departures from compliance with the base regulations may be granted by the City Council, upon recommendation of the Planning Commission, as a part of the approval of the Planned Development. For example, such departures may include modifications of lot dimensional standards, setback requirements, density standards, parking and landscaping requirements, and similar requirements. Such departures may be approved only on the condition that they will result in a higher quality of development than would be possible using conventional zoning standards.*

COMMENTS: Center zoning will be applied as the base regulation for the entire parcel per §122-572. Departures/exceptions are listed at the conclusion of this review.

(4) ***Street Access.*** *Each lot, main building, and principal use within a Planned Development district shall have vehicular access to a public street. Adequate provision shall be made for dedications of land for streets and essential services.*
COMMENTS: The site will have adequate access to public streets; public streets will be constructed and dedicated per the Purchase Agreement.

(5) ***Usable Open Space.*** *The proposed development shall contain at least as much open space as would otherwise be required by the existing underlying zoning.*
COMMENTS: This requirement is met.

(6) ***Landscaping and Maintenance of Common Areas.*** *All required yards and common areas shall be landscaped and adequately and permanently maintained by the property owner, tenant, or organization responsible for maintaining common areas. Through an irrevocable conveyance, such as deed restrictions or covenants that run with the land, the developer shall assure that all yards and common areas will be developed in accordance to the site plan and not changed to another use.*
COMMENTS: Per purchase agreement (Section 7 b).

(7) ***Additional Considerations.*** *During review of a proposed planned development, the Planning Commission shall take into account the following considerations which may be relevant to a particular project: perimeter setbacks and screening; thoroughfares, drainage, as provided for in best management practices as appropriate, and utility design; underground installation of utilities; insulating pedestrian circulation from vehicular thoroughfares and ways; achievement of an integrated development with respect to signage, lighting, landscaping and building*

materials; and noise reduction mechanisms, particularly in cases where non-residential uses adjoin off-site residentially-zoned property.

COMMENTS: Staff notes these issues in the following review. This project does not adjoin or abut any other future development/parcels; this development occupies the entirety of a block.

SITE PLAN: CRITERIA AND REVIEW §122-128

STANDING §122-128(1)

The applicant is legally eligible to apply for site plan review, and all required information has been provided.

Section 122-571 provides review procedures for Planned Unit Development applications:

1) Pre-application conference
2) Formal PUD Application
3) *Planning Commission review, public hearing, and recommendation* ***(we are here)***
4) City Council Action

REQUIREMENTS §122-128(2)

"The proposed site plan conforms with all the provisions and requirements, as well as the spirit and intent of this chapter and the Master Plan. The proposed development will meet all the regulations of the zoning district in which it is located."

"[Centers] are mixed-use areas with historic buildings. These are the places where people shop, go to school, live, come to work, visit, drop by City Hall, eat, gather and have fun. They host events that bring thousands of visitors each year and bring the City together as a community. The intent of the zoning district is preserve the urban form, walkable nature and vibrant mix of uses in these areas."

Figure 3: Requirements

ORDINANCE REFERENCE	REQUIRED		EXISTING CONDITIONS	PROPOSED
C: §122-274 BUILDING TYPE	Determined by lot size and building type limitations		Vacant	Apartment Building
LOT REQUIREMENTS				
Width ft	**Min** 40	**Max** 300	Vacant	**321.33 ft**
Depth ft	**Min** 100	**Max** 300	Vacant	272.82
Area sf	**Min** 4000	**Max** 90,000	Vacant	74,069
Coverage %	**Min** -	**Max** 80%	Vacant	75.9%
BUILDING ENVELOPE AND HEIGHT				
Street setback ft	**Min** 10	**Max** 25	Vacant	Approx 10 ft
Side setback ft	**Min** 5	**Max** -	Vacant	**Approx 10 ft on north side. South side appears to be 1 foot.**

ORDINANCE REFERENCE	REQUIRED		EXISTING CONDITIONS	PROPOSED
Rear setback ft	**Min** 15	**Max** -	Vacant	27.9 ft
Frontage buildout %	**Min** 60	**Max** 80	Vacant	**Approximately 89%**
Height stories	**Min** 2	**Max** 6	Vacant	4
PARKING PROVISIONS	Location: Side and rear yards		Vacant	Parking is fully contained within the development behind the structures.
PRIVATE FRONTAGES	Required: Porch, Forecourt, or Stoop		Vacant	**None provided**
§122-861 et seq **SIGNAGE**	Master sign plan: HC, NC, GC, C, PMD, P; nonres uses in R1, CN-SF, CN-Mid, CN, MD		Vacant	**No sign plan provided**
Area maximum	By sign type		Vacant	Unknown
Height maximum	N/A (ground signs not permitted in C)		Vacant	N/A
Setbacks minimum	N/A (ground signs not permitted in C)		Vacant	N/A

Items to be Addressed:

1. *Lot width exceeds maximum. Exception requested.*
2. *Building encroaches into side yard setback. Exception requested.*
3. *Frontage buildout exceeds maximum. Exception requested.*
4. *No private frontage shown on River. Show private frontage.*
5. *No sign plan provided. May be provided at time of sign permit application.*

BUILDING LOCATION AND SITE ARRANGEMENT §122-128(3)

"All elements of the site plan shall be harmoniously and efficiently organized in relation to the character of the proposed use, the size and type of lot, the size and type of buildings, and the character of the adjoining property. The site shall be so developed as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this chapter."

The proposed Water Street Flats building will be oriented toward River Street, with another building face extending the length of a block along Gilbert Street. The L-shaped building runs along the west and south sides of the block, with surface, garage, ADA-accessible, and bicycle parking provided in the remaining space to the east. Vehicular driveways open onto South and S Lincoln Streets. A trash enclosure is proposed at the northeast corner of the parking lot.

Items to be Addressed: *None.*

SITE ACCESS, TRAFFIC, AND PARKING §122-128(4)

"With respect to vehicular and pedestrian circulation on the site, including walkways, interior drives, and parking; circulation shall to the extent possible create potential cross-and joint-access to adjacent parcels and the existing block layout. Special attention shall be given to the location, number and spacing of ingress and egress points; general interior circulation including turnaround areas; adequate provisions for delivery of services (trash removal, school buses, mail and parcel delivery); separation of pedestrian and vehicular traffic; avoidance of building corners next to access drives; identification of addresses; storage of plowed snow; and arrangement of parking areas that are safe and convenient, and insofar as practicable, do not detract from the design of the proposed buildings and structures, neighboring properties, pedestrian and bicyclist safety, access to transit and flow of traffic on adjacent streets. All buildings or groups of buildings shall be so arranged as to permit adequate access by emergency vehicles as required by the city building code."

The parcel being created for Water Street Flats is based on maintaining the existing street grid created by River Street, Michigan Ave and the future Gilbert, South, and S Lincoln Streets.

Figure 4: Circulation Standards

	ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
C: §122-273	**CIRCULATION STANDARDS**	CN, C, HC, NC, GC, HHS: Sites < 3 acres: circulation plan to ID potential cross and joint access to adjacent parcels	Vacant	**No circulation plan provided**
		Easements: nonmotorized plan, ReImagine Washtenaw, other	Vacant	n/a
§122-834	**PARKING Dimensions**	• 9'x18' minimum, exceptions if adjacent to wall or overhang provided • May have 20% small car (8'x16', signed) • May have 10% motorcycle (5x8', signed)	Vacant	All spaces are 9'x18' No small car or motorcycle spaces
§122-835	**Access**	5' walkway from parking lot to parks, commercial, transit, walkways, institutions; raised/marked crosswalks within parking lot	Vacant	5' walkway surrounds parking lot **No raised/marked crosswalks within parking lot or across driveways**

Ingress & Egress	• Aligned across ROW, or offset by 25' • >50' from intersection • 20'-30' driveway	Vacant	• No curbcuts across ROW • >50' from intersection • 22' driveways
Internal Maneuvering	10' minimum drive 90°: 22' maneuvering lane Total w 1 tier: 42' Total w 2 tiers: 62'	Vacant	Drive: 10' Maneuvering lane: 22' **Total w 2 tiers: 58'**
Surfacing	Durable bonded material or acceptable alternative	Vacant	Asphalt
Drainage	Graded and drained to public storm sewers Alt. BMPs considered	Vacant	Drained to public storm sewers and detention basin
Striping	Required	Vacant	Provided
Wheel Stops	Required (curbing acceptable); 6" high at sidewalks	Vacant	6" curbing provided around perimeter
Lighting	§122-641 below	See below	See below
Signs	§122-861 above	See above	See above
Screening & Landscaping (internal)	1 tree per 8 spaces = 72/8 = 9	Vacant	9 trees total within the complex
	1 landscape island for each continuous 16 spaces	Vacant	Met
	Islands w trees: 9' wide min and 160' sf Islands w 5' min walkway: 11' wide min Islands: curbed or used for stormwater	Vacant	Island w trees are greater than 9' Square footage is 160' Walkways are greater than 11' wide
	All aisle-ends & corners protected w curbed island	Vacant	All aisles are protected w curbed island
	3' between curb and planting (5' if vehicle overhang)	Vacant	There is 5' between the curb and planting
Screening & Landscaping (perimeter)	Screened in accordance with 703 if abutting R1, MD, CN, CN-Mid, CN-SF	Vacant	Screened with various shrubs surrounding the perimeter.
	3'-4' screen 80% opacity where visible from ROW	Vacant	3'-4' opacity when visible from ROW
	Landscaped areas, walls, structures, walks- must be protected by curbing	Vacant	All landscaped areas walls, structures, walk are protected by curbs

§122-836	**Motor spaces**	1.5 for each dwelling unit, plus 1 for each 10 dwelling units for guest parking.	Vacant	128 parking spots total including garage space
	Bicycle spaces	1 per 5 motor spaces, minimum of 2 72 motor spaces provided; 15 bike spaces required	Vacant	16 total bicycle spaces
§122-837	**Parking discounts**	Transit *20% if w/in 300' of commuter rail or 100' of transit stop*	Vacant	Bus stop 550ft. from north of parcel
		Alternative Vehicles *1 car –sharing spot = 4 spaces* *1 carpooling/vanpooling = 2 spaces-*	Vacant	None
		Bicycle *4 covered bike spaces = 1 space;* *free employee showers = 4 spaces*	Vacant	No covered bike spaces provided.
		PC discretion, special circumstances not listed above	Vacant	n/a
§122-647	**SIDEWALKS**	provide a sidewalk or shared-use path	Vacant	**Sidewalks shown along one side of street only. Sidewalks shall be constructed along both sides of street**.
§122-649	**TRAFFIC VISIBILITY**	Maintain shrubs/other obstructions lower than 30" and trees/other obstructions higher than 8': At driveway: within a 10'x10' triangle formed by the street ROW line and the edge of the driveway At intersection: within a 25' x 25' triangle formed by an extension of the property lines, as measured from the pavement edges.	Vacant	Met.

Items to be Addressed:

1. *No circulation plan provided. Exception requested due to lack of other development at this time.*
2. *No marked crosswalks within parking lot or across driveways. Applicant to provide.*
3. *Increase the total parking bay & maneuvering aisle width from 58' to 62'.*
4. *Sidewalks shown along one side of street only. Sidewalks shall be constructed along both sides of streets.*

STREET DESIGN §122-128(5)

"Streets are designed in context with the urban form and continue the established pattern of the surrounding area."

Staff is presenting proposed cross-sections for street design within the Water Street Redevelopment Area to Planning Commission on 3/18/2015. The layout of the streets as proposed will need to conform with those cross-sections.

Items to be Addressed:

1. *Conform to adopted street cross-sections.*

ENGINEERING & STORMWATER §122-128(6), §122-128(7)

"Adequate services and utilities including sanitary sewers shall be available or provided, with sufficient capacity to properly serve the development. Appropriate measures will be taken to ensure that site drainage will not adversely affect adjoining properties or the capacity of the public storm drainage system, or nearby bodies of water. Provisions shall be made to accommodate stormwater and prevent soil erosion. All stormwater management facilities, including but not limited to storm sewers and detention/retention facilities, shall be designed in accordance with the "Rules of the Washtenaw County Water Resources Commissioner," together with any special provisions established by the city.
Natural resources will be protected to the maximum feasible extent. The proposed development will not cause soil erosion or sedimentation problems, and will respect floodways or floodplains on or in the vicinity of the subject property."

See Engineer's letter dated 3/12/2015.

Items to be Addressed:

Site Plan

1. *There are significant issues with the site grading. The site grading shall be revised to accommodate the extension of South Street and the future extension of Lincoln and Water Street.*
2. *The first flush volume must be treated prior to discharge from the site. Off-site detention will not be required.*
3. *The domestic water service will require review and approval from YCUA.*
4. *A dedicated fire protection line and FDC shall be provided that meets the requirements of the Fire Department.*
5. *The sidewalk perpendicular to parking shall be a minimum of 7' wide.*
6. *The parking and aisle geometrics must meet Section 122.834 of the Zoning Ordinance. The total width is currently below the minimum standards.*
7. *A circulation plan shall be provided that shows the site can accommodate refuse vehicle movements.*

Public Infrastructure

1. *The proposed road geometry shall be as shown on the attached details.*
2. *The full right-of-way shall be developed for all proposed streets. This includes parking bays and sidewalks on both sides of the street.*
3. *Dead end intersections shall be continued to the spring point in the terminus direction.*

4. *The proposed utility sizes do not coincide with the utility master plan. The City/ YCUA will provide additional information during the engineering plan review phase on required public utility sizing. YCUA review and approval will be required for all proposed water main and sanitary sewer.*
5. *River Street shall be three lanes from Michigan Avenue 250 feet south. A 75 foot taper is required to transition back to the two lane section.*
6. *South Street shall continue to the connection at Park Street.*
7. *Water Street shall be relabeled as 'Gilbert Street'.*

SCREENING §122-128(8)

"The site plan shall provide reasonable visual and sound privacy for all dwelling units on or adjacent to the property. Fences, walks, barriers, and landscaping shall be used, as appropriate, for protection and enhancement of the property. All outdoor storage of materials, loading and unloading areas, and refuse containers shall be screened or located so as not to be a nuisance. Outdoor lighting shall be shielded so as to not adversely affect neighboring properties or traffic on adjacent streets."

Figure 5: Screening

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
§122-641 Lighting	• Dark Sky compliant; may be full cutoff where affecting residential uses • not >0.5 fc @ lot line • not >16' tall when abutting R1, CN-Mid, CN-SF or abutting one- or two-family homes. otherwise, NTE 30' or the height of the building, whichever less. • not < 0.3 fc at parking/loading areas or building entrances.	Vacant	**>0.5 around lot line; show photometric without streetlights and with streetlights to ensure adequate coverage.** Lithonia Lighting(LC, parking lot poles) is 28' in height Holophane Lighting is 15 feet. **.**
§122-650 Refuse Containers	masonry enclosure 1' taller than dumpster (no less than 6'), in rear yard, 80% opaque swing door, on a concrete pad	Vacant	**Masonry is 8ft tall doesn't say how tall dumpster is. 12' space for door swing.** **Note: appears space allows for only one dumpster for 80 units.**
§122-703 Screening Between Land Uses *if conflicting use*	visual buffer of at least 80% opacity and 6' height	Vacant	Not required.

ORDINANCE REFERENCE		REQUIRED	EXISTING CONDITIONS	PROPOSED
§122-704 & §122-711(e)	**Street Trees**	1 tree per 30' of lineal frontage: South: 298/30=10 Lincoln: 216/30=7 Gilbert: 321/30=11 River: 273/30=9 Spacing: Gingko- large tree' Distance from street corners: 35' Distance from drives/alleys: 15' Distance from streetlights: 15' Skyline Honeylocust- large Distance from street corners: 35' Distance from drives/alleys: 15' Distance from streetlights: 15'	Vacant	South St: 10 trees (skyline honeylocust) Lincoln: 7 (gingko) Gilbert: 11 (gingko) River: 9 (skyline honeylocust) ***Staff recommends the trees be a more diverse mix of species, and that the trees planted on River & Gilbert are of similar form and size, as both are "A" streets.*** *Spacing:* ***requirements re: streetlights not met.*** ***Exception requested for other dimensional requirements due to site considerations.***
		Centered between sidewalk and back of curb		Met
		If part of Urban Forestry Plan, must conform	Not part of Urban Forestry Plan	n/a
§122-705	**Greenbelts** ***If required elsewhere***	1 tree per 30' of lineal frontage abutting public road ROW	Vacant	Not required.
		Natural landscape material groundcover	Soil	Soil and grass
§122-707	**Foundation Landscaping** *Required in MD, PMD zoning districts and with (Large Footprint) Single Story Commercial Buildings on front or sides of buildings facing public ROW, parking, or other access*	6 shrubs per 30 lineal feet of applicable building frontage in 6' wide planting area		Not required.

ORDINANCE REFERENCE	REQUIRED	EXISTING CONDITIONS	PROPOSED
§122-708 Site Landscaping	10%	Soil	**Approximately 9% of the final site is in landscaping. Applicant to show landscape calculations on the plan. Exception requested.**
§122-710 Exterior Electrical	Screen when visible from any primary visual exposure area	Vacant	n/a
§122-712 Maintenance	Readily available and acceptable water supply; may install underground sprinkler system	Vacant	Applicant to note on plan watering/maintenance plan..

Items to be Addressed:

1. *Lighting: >0.5 fc shown at lot line; show photometric both with and without streetlights to ensure adequate coverage.*
2. *Masonry rubbish enclosures is 8ft tall; note that dumpster shall not exceed 7' tall.*
    a. *Note: appears space allows for only one dumpster for 80 units. Applicant responsible for ensuring waste pickup schedule is adequate for the anticipated need.*
3. *Landscaping: Staff recommends the trees be a more diverse mix of species, and that the trees planted on River & Gilbert are of similar form and size or species, if monocultures selected, as both are "A" streets.*
4. *Street tree spacing requirements re: streetlights not met. Run photometrics with street trees and with streetlights to confirm tree placement.*
   Exception requested for other street tree dimensional requirements due to site considerations.
5. *Approximately 9% of the final site is in landscaping. Applicant to show landscape calculations on the plan. Exception requested due to site constraints.*

PHASING §122-128(9)

"Separate phases of development shall be in logical sequence, and each phase shall stand alone so that no one phase will depend upon a subsequent phase for adequate access, public utility services, drainage, or other improvements."

No phasing is planned for this site.

OTHER DEPARTMENT AND AGENCY APPROVALS §122-128(10)

"Site plans shall conform to all applicable requirements of state and federal statutes, including health and pollution laws, fire or explosion hazards, toxic and hazardous materials, and barrier-free requirements. Site plan approval may be conditioned on the applicant receiving necessary county, state, or federal permits before a local building permit or occupancy permit is granted."

DEPARTMENT OF PUBLIC SERVICES

The applicant is responsible for obtaining permits from the Department of Public Services before beginning work on any portion of the City right-of-way, including sidewalks, curbs, and driveways. Final approval of all public infrastructure will be required prior to dedication to the City.

MASTER PLAN CONSIDERATIONS §122-128(11)

"An objective of site plan review shall be to protect and promote public health, safety, sustainability and general welfare. It is also the intent of site plan review to improve the quality of existing developments as they are expanded, contracted, or redeveloped in keeping with sound site development standards of this chapter and city master plan."

In 2013, the Planning Commission adopted a new Master Plan that specifies recommendations for the Water Street Redevelopment Area, including providing direction for the layout for the Water Street Redevelopment area as well as an approval process and standards. In particular, the recommendation is to replicate the existing downtown grid in the development area. The proposed plan extends River Street from Michigan Ave. through the length of the development area, and constructs portions of South, Water, and Lincoln Streets such that they can be seamlessly connected to the existing streets during development of adjacent parcels.

Figure 6: Master Plan Considerations

Requirement	Proposed
Respect rights-of-ways and blocks.	Both are included in the proposed plan.
Block perimeter should be less than 1,200 feet, like other blocks in the City.	Block perimeter is approximately 1,100 feet.
Street layout should connect to existing streets such as Michigan Avenue.	Site plan includes River Street extension to the extent of the proposed parcel
All streets have on-street parking	On-street parking proposed for Water, South Lincoln and River Streets
All streets have sidewalks	All streets have sidewalks
All streets have space for trees and other stuff	Street trees to be provided on all street frontages between sidewalk and street
All driveway aprons have the same design	The driveway aprons are identical.
All buildings are built for multiple uses - with a ground floor to ceiling at a minimum of 12 and a maximum of 14 feet	The plan shows the ground floor to be under 10 feet and upper floors to be under 9 feet.
New developments have A and B streets, similar to the historic downtown.	The proposed River Street extension has no curb cuts and incorporates the sidewalks, parking, street trees, and planting/furnishing zones shown in the plan. The proposed other streets host the curb cuts and incorporate the sidewalks, parking, street trees, and planting/furnishing zones shown in the plan.
Buildings along "A" streets (Michigan Ave., Park and River, and Gilbert Streets), should follow the following urban design rules: • 90-100% of building should face the street • It is built one-to five feet from street right of way • 60% of the front of the first floor is transparent window or glazing • Primary entrance faces "A" street • The first floor of buildings should have active uses – stores, restaurants, services – where people come and go often.	• 100% of the building faces the street • The building is 5 feet from the street ROW • **The 21 10x5 windows and 8 15x5 doorwells offer 16% glazing of the 9,900 sf "A" street building face** • **Though there are doors shown on the River St. building face, the primary entrance appears to be on the parking lot (interior) side of the building** • The first floor of the building is residential.

The specific land use standards on page 68 are included in the chart above.

Page 71 notes that housing has always been part of the vision for the redevelopment of Water Street and the sites offer a central location near goods and services.

Items to be addressed:

1. *The plan shows the ground floor to be under 10 feet and upper floors to be under 9 feet.*
2. *Though there are doors shown on the River St. building face, the primary entrance appears to be on the parking lot (interior) side of the building. This shall be addressed with the addition of a private frontage as required under the zoning ordinance.*

DEVELOPMENT AGREEMENT REQUIREMENTS dated 3/5/2014

HKP will install all road infrastructure, including utilities, street trees, and sidewalks in the following locations:

a. Extend River Street south from Michigan Avenue to Gilbert Street
b. Extend South Street from South Park Street westward to River Street.
c. Extend Lincoln Street from South Street southward.
d. Extend Gilbert Street from River to Lincoln.

With the exception of (b), above, and other exceptions as provided in the Engineer's letter, the requirements are largely met. Any approval given by the City is conditional based on conformance to the Purchase Agreement.

RECOMMENDATIONS

Staff recommends the Planning Commission conditionally recommend to City Council ***approval*** *of* the Planned Unit Development Plan and rezoning to Planned Unit Development for Water Street Flats at 300 S River with the following findings, exceptions, and conditions:

Findings:

1. The proposed development is consistent with the Planned Unit Development concept of providing zoning flexibility in return for material community benefit.
2. The infrastructure proposed has a significant positive impact upon the Water Street Redevelopment Area.
3. The proposed development will be consistent with all surrounding uses
4. The proposed development will not have an adverse impact on traffic or other public services and infrastructure.
5. The proposed development meets several Master Plan goals for the City and for the Water Street Redevelopment area.

Exceptions:

1. Lot width exceeds maximum by 22'. Exception requested.
2. Building encroaches into side yard setback, leaving an approx. 1' setback. Exception requested.
3. Frontage buildout exceeds maximum by 9%. Exception requested.
4. No circulation plan provided. Exception requested due to lack of other development at this time.
5. Approximately 9% of the final site is in landscaping. Applicant to show landscape calculations on the plan. Exception requested due to site constraints.
6. Exception requested for street tree dimensional requirements, other than distance from streetlights, due to site considerations.

Conditions:

1. No private frontage shown on River. Applicant to show private frontage.
2. No sign plan provided. Applicant to provide at time of sign permit application.
3. No marked crosswalks within parking lot or across driveways. Applicant to provide.
4. Increase the total parking bay & maneuvering aisle width from 58' to 62'.
5. Sidewalks shown along one side of streets only. Sidewalks shall be constructed along both sides of streets.

6. The site grading shall be revised to accommodate the extension of South Street and the future extension of Lincoln and Gilbert Street.
7. The first flush volume must be treated prior to discharge from the site. Off-site detention will not be required.
8. The domestic water service will require review and approval from YCUA.
9. A dedicated fire protection line and FDC shall be provided that meets the requirements of the Fire Department.
10. The sidewalk perpendicular to parking shall be a minimum of 7' wide.
11. A circulation plan shall be provided that shows the site can accommodate refuse vehicle movements.
12. The proposed road geometry shall be in accordance with that provided by the City Engineer.
13. The full right-of-way shall be developed for all proposed streets. This includes parking bays and sidewalks on both sides of the street.
14. Dead end intersections shall be continued to the spring point in the terminus direction.
15. The proposed utility sizes do not coincide with the utility master plan. The City/ YCUA will provide additional information during the engineering plan review phase on required public utility sizing. YCUA review and approval will be required for all proposed water main and sanitary sewer.
16. River Street shall be three lanes from Michigan Avenue 250 feet south. A 75 foot taper is required to transition back to the two lane section.
17. South Street shall continue to the connection at Park Street.
18. Water Street shall be relabeled as 'Gilbert Street'.
19. Lighting: >0.5 fc shown at lot line; show photometric both with and without streetlights to ensure adequate coverage.
20. Masonry rubbish enclosure is 8’ tall; note on the site plan that dumpster shall not exceed 7’ tall.
21. Landscaping: Staff recommends the trees be a more diverse mix of species, and that the trees planted on River & Gilbert are of similar form and size or species, if monocultures selected, as both are “A” streets.

Bonnie Wessler
Acting Planner II, Planning & Development Dept.

Cc: File
Applicant (HKP)
Engineer (Metro Consulting Associates)

WATER STREET FLATS PLANNED UNIT DEVELOPMENT AGREEMENT

This Water Street Flats Planned Unit Development ("WSFPUD") Agreement (the "Agreement") is by and between Herman & Kittle Properties, Inc. ("Developer"), whose address is 500 E. 96th Street, Suite 300, Indianapolis, IN 46240, and The City of Ypsilanti, a Michigan municipal corporation ("City"), whose address is One South Huron Street, Ypsilanti, Michigan 48197.

RECITATIONS

City is the fee owner of the property described on the attached and incorporated EXHIBIT A (the "Property"), located in Ypsilanti, Washtenaw County, Michigan, and Developer, or Developer's assigns, desires to purchase and develop the property described on the attached and incorporated EXHIBIT B ("Water Street Flats Property") for a multi-family apartment community.

Additional development will occur on the Water Street Redevelopment Area, and is expected to be done through a series of Planned Unit Development (PUD) rezoning which does, or will, affect the Water Street Flats Property (the "Water Street Development PUD").

Now Developer voluntarily proposes additional conditions and rights for the Water Street Flats Property. Accordingly, Developer has applied for approval of an amendment to the Ypsilanti Zoning Ordinance. Developer or its assignee will be the developer and proprietor of the WSFPUD.

This WSFPUD establishes additional rights and conditions that affect the development of the Property and the Water Street Flats Property.

For the purpose of confirming the rights and obligations in connection with the improvements, development, and other obligations to be undertaken on the Water Street Flats Property, the parties have entered into this Agreement to be effective on the effective date of the City's Zoning Ordinance rezoning the Water Street Flats Property to the Water Street Flats Planned Unit Development.

Now, therefore, as an integral part of the rezoning of the Property and approval of the Development on the Property, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, it is agreed as follows:

A. Development as WSFPUD. The Water Street Flats Property shall be developed and improved only in accordance with the following (referred to collectively as the PUD Documents):

1. Article IX of the Ypsilanti Zoning Ordinance, as amended

2. This Water Street Flats Planned Unit Development Agreement.

3. Deed restrictions covering all property within the PUD, to be approved and recorded in the manner set forth in this Agreement.

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4. Any development agreement covering a larger development area, of which the Water Street Flats Development is a part, including but not limited to the Water Street Redevelopment Area.

5. Any and all conditions of the approval of the Ypsilanti City Council and Planning Commission pertaining to the WSFPUD as reflected in the official minutes of such meetings.

6. Recordation with the Washtenaw County Register of Deeds office of an affidavit by the owner of the Property on the effective date of the rezoning, approved by the City Attorney, containing the legal description of the Property and the Water Street Flats Property, specifying the date of approval of the Water Street Flats Planned Unit Development, and declaring that all future development of the Property and Water Street Flats Property has been authorized, restricted, and required to be carried out only in accordance with the Ordinance rezoning the Water Street Flats Property to the Water Street Flats Planned Unit Development.

7. The Ordinance establishing the Water Street Flats Planned Unit Development.

8. A variance shall be requested from the underlying C zoning, reducing the front setback along Water Street from 10 feet to 1.5 feet.

Furthermore, all development, use, and improvement of the Water Street Flats Property shall be subject to and in accordance with all applicable City ordinances, and shall also be subject to and in accordance with all other approvals and permits required under applicable City ordinances, the WSFPUD Documents, and state laws for the respective components of the WSFPUD. To the extent that there are conflicts or discrepancies between respective provisions of the WSFPUD Documents, or between provisions of the WSFPUD Documents and City ordinances, interpretation shall be based on the more strict regulation of the Water Street Flats Property and interpretation shall be subject to the reasonable discretion of the Ypsilanti City Council of Trustees.

B. Effect of PUD Approval. The Ordinance rezoning the Water Street Flats Property to the Water Street Flats Planned Unit Development amends the zoning of the Property and constitutes the land use authorization for the Water Street Flats Property, and all use and improvement of the Water Street Flats Property shall be In conformity with such Ordinance and this Agreement

C. Signage.

1. Developer shall be granted the right to install a temporary sign along Michigan Avenue during construction and lease-up.

2. In the event the City, or the then current owner of the Property is granted the right to construct a multi-tenant ground sign identifying more than one tenant, owner or occupant within the Property, more or less as depicted on EXHIBIT C (the "Multi-Tenant Sign"), Developer, its successors or assigns, shall be granted the right to install a panel within the multi-tenant sign in the upper most panel location and at a size equal to the largest of any other tenant panel.

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D. Drives and Parking Lots.

1. Developer shall pay for the installation and construction of all streets, including sidewalks and parallel parking spaces along River Street and portions of Water Street, South Street and Lincoln Street as set forth in EXHIBIT B. Upon completion of the Water Street Flats Property, public infrastructure including River Street and portions of Water Street, South Street and Lincoln Street as set forth in EXHIBIT B shall be deeded back to the City, who shall pay for, maintain and repair all streets, parking spaces and sidewalks then forth. Specific infrastructure paid for and installed by Developer includes:

    - Construct approximately 950 lineal feet of River Street from Michigan to Water Street. Improvements include sidewalk on east side of the road, one light at intersection of River Street & Michigan, one light at River Street & Parsons, one light at River Street & South, one light at River Street & Water. Water, sanitary sewer, and storm in River Street to Water Street.
    - Construct approximately 350 lineal feet of South Street and parking between River and Lincoln. Improvements include sidewalk on the south side of the road, water, sewer, and storm in South Street between River and Lincoln.
    - Construct approximately 250 lineal feet of Lincoln Street and parking from South to Water Street. Improvements include sidewalk on west side of the road, storm in Lincoln Street from South to Water Street.
    - Construct approximately 350 lineal feet of Water Street and parking from Lincoln to River Street. Improvements include sidewalk on north side of the road, sanitary sewer from River Street to existing sanitary, and storm in Water Street from Lincoln to first flush basin

E. Enforcement; Severability. Any failure or delay by City to enforce any provision contained in this Agreement shall in no event be deemed, construed, or relied on as a waiver or estoppel of the right to eventually do so in the future. This Agreement is intended to establish zoning ordinance regulations applicable to the Water Street Flats Property and shall be enforceable as a contract with contract remedies. Each provision and obligation contained in this Agreement shall be considered to be an independent and separate covenant and agreement and, in the event one or more of the provisions and/or obligations shall for any reason be held to be invalid or unenforceable by a court of competent jurisdiction, all remaining provisions and/or obligations shall nevertheless remain in full force and effect.

G. Agreement Jointly Drafted. Developer has negotiated with City the terms of the PUD Documents and such documentation represents the product of the joint efforts and mutual agreements of Developer and City. Developer fully accepts and agrees to the final terms, conditions, requirements, and obligations of the PUD Documents, and Developer shall not be permitted in the future to claim that the effect of the PUD Documents results in an unreasonable limitation on uses of all or a portion of the Property or claim that enforcement of the PUD Documents causes an inverse condemnation, other condemnation, or taking of all or any portion of the Property. Furthermore, it is agreed that the Improvements and undertakings described in the PUD Documents are necessary and roughly proportional to the burden imposed, and are necessary in order to (1) ensure that public services and facilities necessary for and affected by the Development will be capable of

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accommodating the development on the Property and the increased service and facility loads caused by the Development; (2) protect the natural environment and conserve natural resources; (3) ensure compatibility with adjacent uses of land; (4) promote use of the Property in a socially, environmentally, and economically desirable manner; and (5) achieve other legitimate objectives authorized under the Michigan Zoning Enabling Act, MCL 125.3101 et seq. It is further agreed and acknowledged that all such improvements, both on-site and off-site, are clearly and substantially related to the burdens to be created by the development of the Property and all such improvements without exception are clearly and substantially related to City's legitimate interests in protecting the public health, safety, and general welfare.

H. Ambiguities and Inconsistencies. Where there is a question with regard to applicable regulations for a particular aspect of the Water Street Flats Property or with regard to clarification, interpretation, or definition of terms or regulations, and there are no apparent express provisions of the PUD Documents that apply, City, in the reasonable exercise of its discretion, shall determine the regulations of City's Zoning Ordinance, as that Ordinance may have been amended, or other City ordinances that are applicable, provided such determination is not inconsistent with the nature and intent of the PUD Documents. In the event of a conflict or inconsistency between two or more provisions of the PUD Documents, or between the PUD Documents and applicable City ordinances, the more restrictive provision, as determined in the reasonable discretion of City, shall apply.

I. Warranty of Ownership. City warrants that it is the owner in fee simple of the Property and Water Street Flats Property.

J. Running with the Land; Governing Law. This Agreement shall run with the land constituting the Property and the Water Street Flats Property and shall be binding on and insure to the benefit of City and its successors, Developer, all future owners, and builders of any part of the Property, all undersigned parties, and all of their respective heirs, successors, assigns, and transferees. An affidavit providing notice of the rezoning of the Property, the PUD Documents, this Agreement, and the general obligations relating to the PUD shall be executed by the property owners and may be recorded by any of the undersigned parties following the execution of this Agreement. This Agreement shall be interpreted and construed in accordance with Michigan law and shall be subject to enforcement only in Michigan courts. The parties understand and agree that this Agreement is consistent with the intent and provisions of the Michigan and U.S. Constitutions and all applicable law.

K. Single Ownership and/or Control of PUD Property. City represents and warrants that the single ownership and/or control of the Property has been vested solely in City in accordance with and for all purposes necessary to satisfy Section 122-573 of City Zoning Ordinance, and City is fully authorized and empowered to rezone and develop the Property and the Water Street Flats Property in accordance with and pursuant to the PUD Documents and all other documents, agreements, plans, dedications, ordinances, and recordings applicable to the Water Street Development PUD and the Water Street Flats Planned Unit Development as submitted to and as approved by the Ypsilanti City Council.

L, As indicated in section 13. (C) (i) of the "Agreement to Purchase Real Estate" planed 3-10-2014:

Purchaser shall construct all improvements to and within the Property in accordance with the plans that have been approved by the City. Purchaser shall commence construction of such improvements within six (6) months from the Closing date and shall complete such improvements within twenty four (24) months

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from the Closing date. For purposes of the foregoing, commencement of construction shall mean that Purchaser has obtained all permits and approvals necessary for the construction of such improvements and that all necessary utility improvements and building footings have been installed. Purchaser agrees that Purchaser's business within the Property shall be fully stocked and fully staffed and Purchaser shall commence operation its business from the Property within twenty four (24) months from the Closing date. If said improvements are not completed in the time designated above, the FDPUD rezoning shall default to the underlying zoning on the site.

This Agreement was executed by the respective parties on the date specified with the notarization of their signatures and shall be considered to be dated on the date of the City Council's adoption of the Ordinance rezoning the Water Street Flats Property to the Water Street Flats Planned Unit Development, and shall take effect on the effective date of that Ordinance.

[Signature page follows]

DRAFT

DEVELOPER:

Herman & Kittle Properties, Inc.
An Indiana Corporation

By: _____

Name: _____

Its: _____

CITY:

City of Ypsilanti
A Michigan municipal corporation

By: _____

Name: _____

Its: _____

EXHIBIT A – LEGAL DESCRIPTION

Parcel 1

Part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1436.81 feet to the Place of Beginning; thence S81°37'17"W 321.33 feet; thence N2°22'02"E 272.82 feet; thence S88°03'48"E 297.91 feet; thence S2°22'02"W 96.64 feet; thence Southerly 49.33 feet along a 263.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 49.25 feet; thence S8°22'43"E 70.70 feet to the Place of Beginning.

Parcel 2

Part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1369.75 feet to the Place of Beginning; thence S8°22'43"E 54.12 feet; thence S81°37'17"W 467.04 feet; thence N2°22'02"E 966.31 feet to the South right of way line of Michigan Street (99 feet wide); thence S87°58'19"E 66.0 feet along said South line; thence S2°22'02"W 548.18 feet; thence S88°03'48"E 580.82 feet to the West line of Park Street (66 feet wide); thence S2°40'11"W 66.01 feet along said West line; thence N88°04'28"W 216.56 feet; thence S2°22'02"W 97.14 feet; thence Southerly 36.95 feet along a 197.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 36.89 feet; thence S8°22'43"E 82.58 feet to the Place of Beginning. Except that part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1436.81 feet to the Place of Beginning; thence S81°37'17"W 321.33 feet; thence N2°22'02"E 272.82 feet; thence S88°03'48"E 297.91 feet; thence S2°22'02"W 96.64 feet; thence Southerly 49.33 feet along a 263.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 49.25 feet; thence S8°22'43"E 70.70 feet to the Place of Beginning.

EXHIBIT B – SITE PLAN

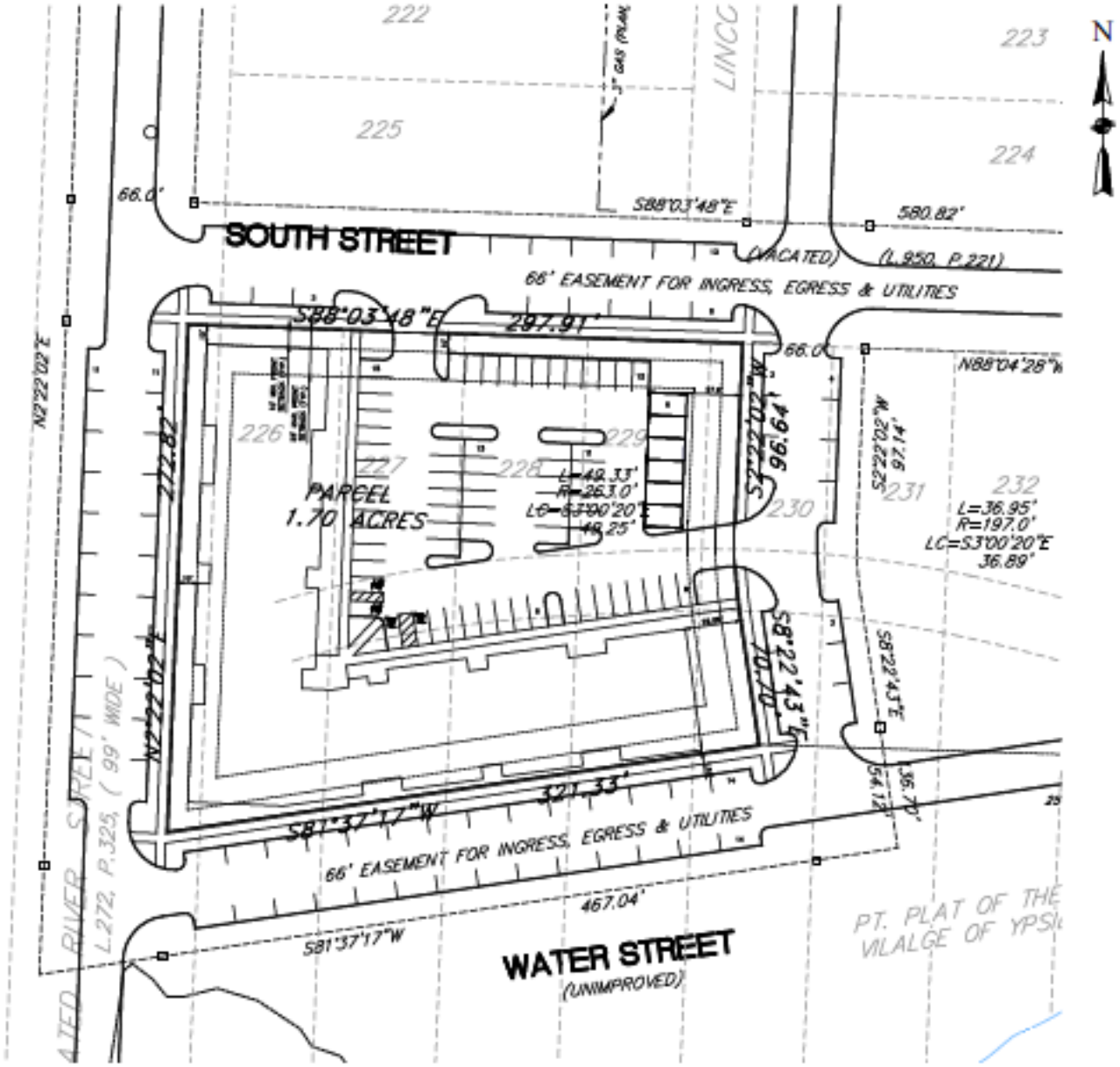

EXHIBIT C – ELEVATION

1 A.201 SOUTH ELEVATION
SCALE: 1" = 20'

2 A.202 EAST ELEVATION
SCALE: 1" = 20'

1 A.202 WEST ELEVATION
SCALE: 1" = 20'

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities

March 12, 2015

City of Ypsilanti
Planning and Development Department
One South Huron Street
Ypsilanti, Michigan 48197

Attention: Ms. Bonnie Wessler

Regarding: Water Street Flats
Site Plan Review No. 1
OHM Job No. 0094-15-1032

Dear Ms. Wessler:

The applicant is requesting site plan approval for a new apartment complex on the Water Street Property. The plans are dated February 18, 2015. The plan includes significant public infrastructure as well. We have reviewed the plans and do not recommend site plan approval. The applicant must address the following comments prior to resubmittal:

Site Plan

1. There are significant issues with the site grading. The site grading shall be revised to accommodate the extension of South Street and the future extension of Lincoln and Water Street.
2. The first flush volume must be treated prior to discharge from the site. Off-site detention will not be required.
3. The domestic water service will require review and approval from YCUA.
4. A dedicated fire protection line and FDC shall be provided that meets the requirements of the Fire Department.
5. The sidewalk perpendicular to parking shall be a minimum of 7' wide.
6. The parking and aisle geometrics must meet Section 122.834 of the Zoning Ordinance. The total width is currently below the minimum standards.
7. A circulation plan shall be provided that shows the site can accommodate refuse vehicle movements.

Public Infrastructure

8. The proposed road geometry shall be as shown on the attached details.
9. The full right-of-way shall be developed for all proposed streets. This includes parking bays and sidewalks on both sides of the street.
10. Dead end intersections shall be continued to the spring point in the terminus direction.
11. The proposed utility sizes do not coincide with the utility master plan. The City/YCUA will provide additional information during the engineering plan review phase on required public utility sizing. YCUA review and approval will be required for all proposed water main and sanitary sewer.
12. River Street shall be three lanes from Michigan Avenue 250 feet south. A 75 foot taper is required to transition back to the two lane section.

OHM Advisors
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
T 734.522.6711
F 734.522.6427
OHM-Advisors.com

13. South Street shall continue to the connection at Park Street.
14. Water Street shall be relabeled as 'Gilbert Street'.

If you have any questions please contact me at (734) 522-6711.

Sincerely,

OHM Advisors

Marcus J McNamara

CC: Stan Kirton, Department of Public Works, One South Huron Street, Ypsilanti, MI 48197
Scott Westover, P.E., YCUA, 2777 State Street, Ypsilanti, MI 48198
Mike Rodriquez, Herman & Kittle Properties, Inc., 500 E. 96th Street, Ste 300, Indianapolis, IN 46240
Andrew Walters, P.E. Metro Consulting Associates, 45345 Five Mile Road, Plymouth, MI 48170
File

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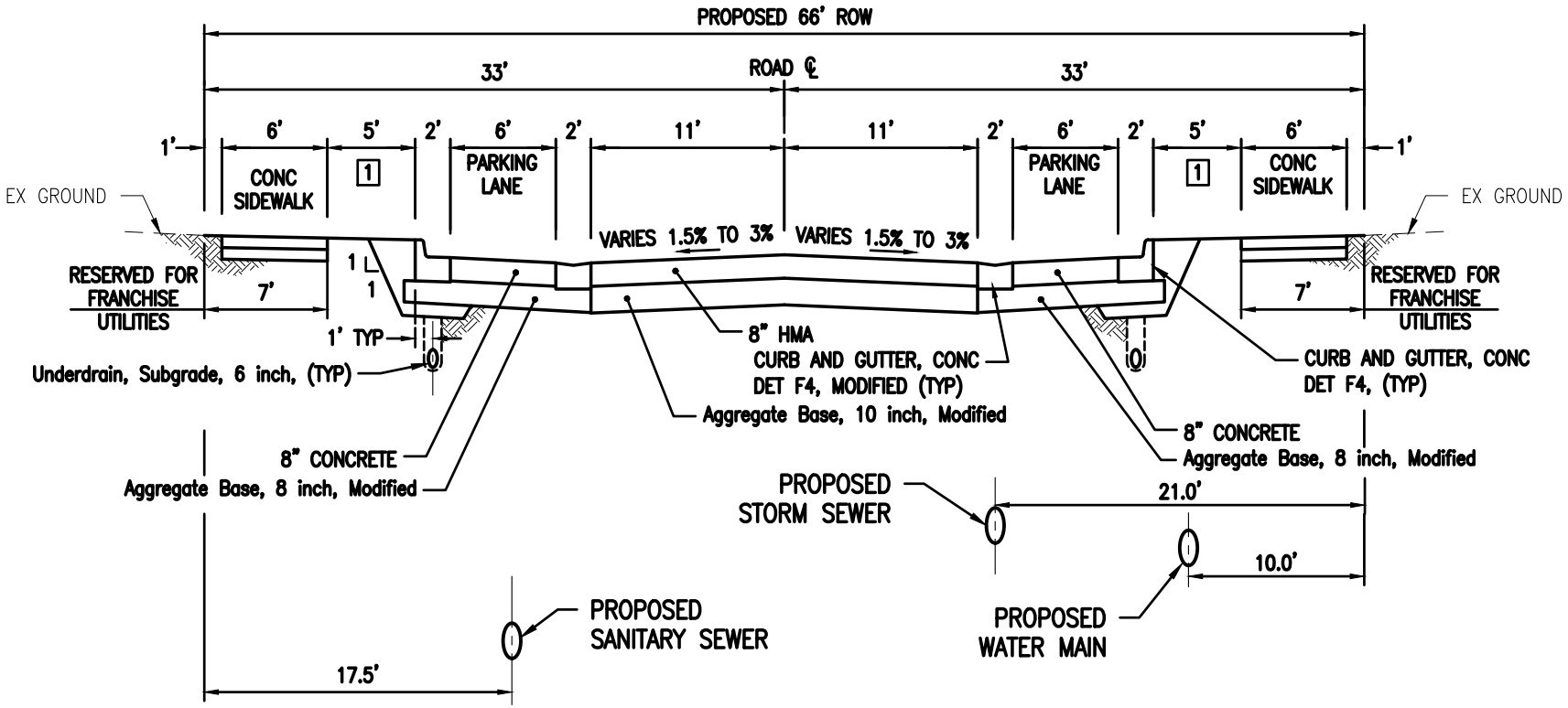

A & B STREET – PARKING SECTION

[1] GRASS OR HARDSCAPE AS DETERMINED BY CITY (TYP)

WATER STREET DEVELOPMENT

TYPICAL ROAD CROSS SECTIONS

SCALE
H: 1" = 10' V: N.T.S.

SHEET
1
OF 3

CLIENT:
CITY OF YPSILANTI

JOB #
0094-13-0060

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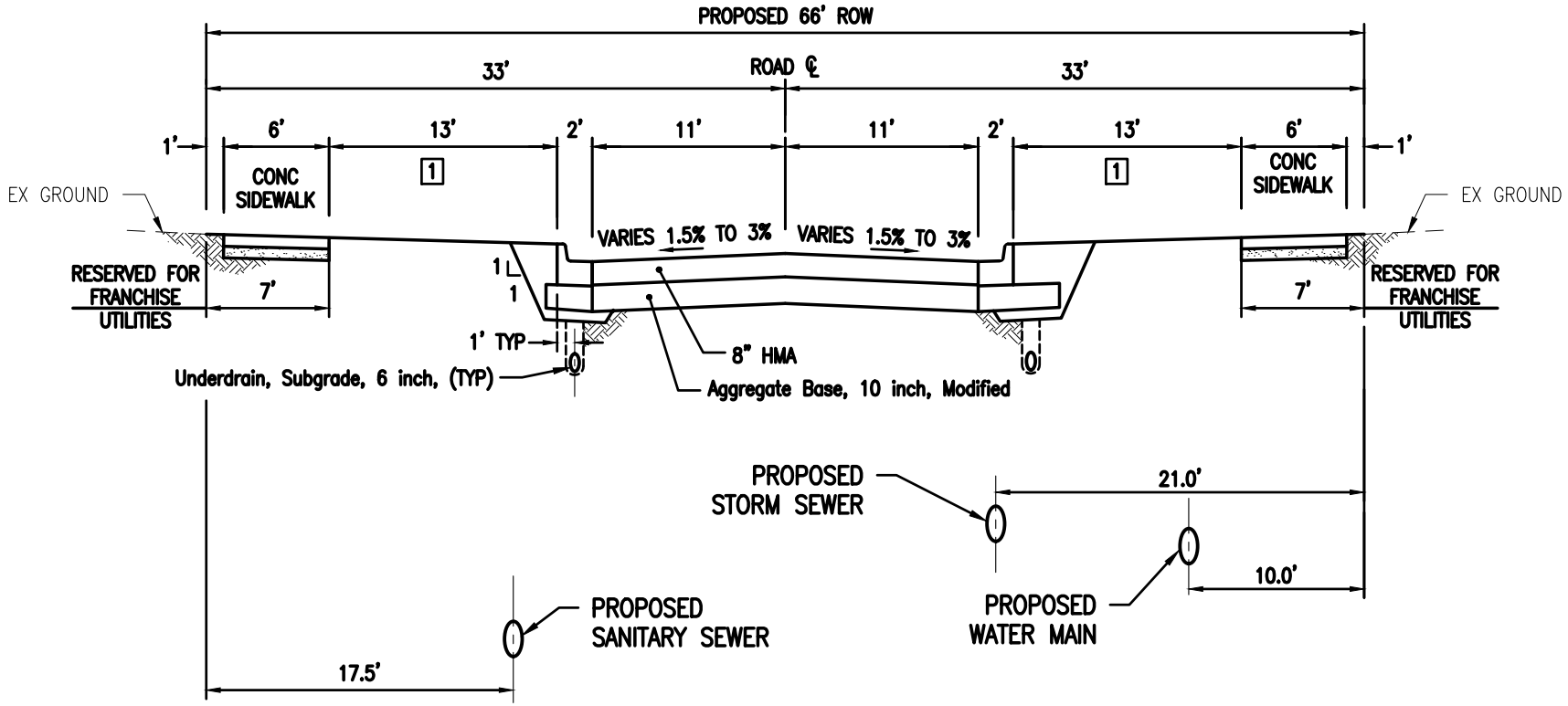

A & B STREET – NO PARKING SECTION

[1] GRASS OR HARDSCAPE AS DETERMINED STREET BY CITY (TYP)

WATER STREET DEVELOPMENT

TYPICAL ROAD CROSS SECTIONS

SCALE H: 1" = 10' V: N.T.S.

SHEET 2 OF 3

CLIENT: CITY OF YPSILANTI

JOB # 0094-13-0060

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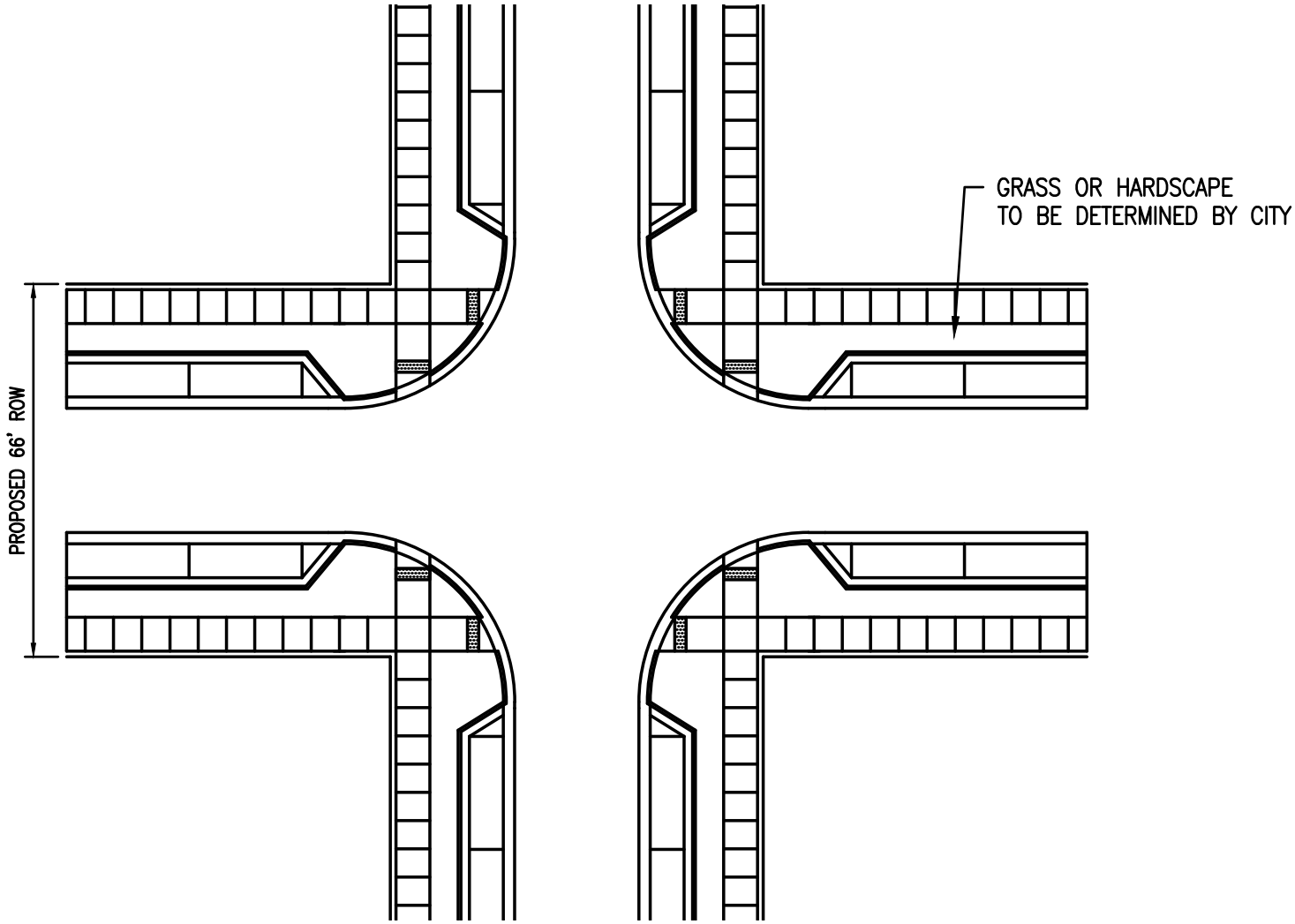

A & B STREET INTERSECTION – PLAN VIEW

WATER STREET DEVELOPMENT

TYPICAL INTERSECTION GEOMETRY

SCALE
H: 1" = 30' V: N.T.S.

SHEET
3
OF 3

CLIENT:
CITY OF YPSILANTI

JOB #
0094-13-0060

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City of Ypsilanti

Community & Economic Development Department

Memo

To: Planning Commission

From: Bonnie Wessler, Acting Planner II

Date: 14 March 2015

Subject: Nonconforming ordinance

During the Master Planning public input process and the zoning ordinance input process, staff heard from residents who were not unwilling to allow nonconforming multifamily uses in lower-density/lower-intensity zoning districts (such as a three-apartment in a single-family residential area), but who were not pleased with the prospect of new multifamily uses in lower-density/lower-intensity zoning districts. Owners of these multifamily uses were also concerned with the potential loss of the investment these multifamily uses represented. At the time, staff was unable to find a way to allow these uses to continue, without allowing new uses to be established or the existing uses to expand. Staff has worked with our consultants to find a possible solution in Trenton's zoning ordinance: a special category for certain types of nonconforming uses, called "nonconforming A."

Higher-density multifamily uses in lower-density residential districts would be eligible to apply for this status. The process would be similar to a special use process, requiring public noticing and certain findings of fact; the status could run with the land. Planning Commission is asked to review the draft ordinance and recommend changes as needed, but in particularly with regards to 122-207(c)(4); two choices of wording are before you. A draft of the ordinance is attached, as is the current ordinance; a blackline version will be available at the meeting.

ARTICLE VI. NONCONFORMING USES , BUILDINGS, STRUCTURES OR LOTS*

***State law reference(s)--**Nonconforming uses and structures, MCL 125.583a, MSA 5.2933(1).

Sec. 122-201. Description and purpose.

It is recognized that there exists within the districts established by this chapter uses of land which were lawful before this chapter was passed or amended, but which would be prohibited or restricted under the terms of this chapter.

It is the intent of this chapter to permit these nonconformities to continue until they are removed, abandoned, or brought into compliance with this chapter but not to encourage their survival. Such uses are declared by this chapter to be incompatible with permitted uses in the districts. It is further the intent of this chapter that nonconforming buildings, structures, or lots shall not be enlarged upon, expanded or extended, nor be used as grounds for adding other structures or uses prohibited in the district.

It is further recognized that certain nonconforming uses are not necessarily contrary to the public health, safety and welfare and that such uses were lawful at the time of their inception, and that no useful purpose would be served by the strict application of the elimination of lawful nonconforming use status. Therefore, two classes of nonconforming uses are designated, being class A and class B. All nonconforming uses are classified as class B nonconforming uses unless designated class A nonconforming uses.

Sec. 122-202. Class B nonconforming uses.

All nonconforming uses of buildings not designated class A shall be class B nonconforming uses of buildings. Class B nonconforming uses of buildings shall comply with all the provisions of this article relative to nonconforming uses of buildings.

Sec. 122-203. Authority to continue class B nonconforming.

Any class B nonconforming use which existed lawfully at the time of the adoption of the ordinance from which this chapter derives and which remains nonconforming and any such use which becomes nonconforming upon the adoption of this article, or of any subsequent amendments thereto, may be continued, subject to the regulations in this article.

Sec. 122-204. Nonconforming lots.

A nonconforming lot is a lot of record or a lot described in a deed or land contract existing at the effective date of the ordinance from which this chapter derives that does not meet the minimum area or lot dimensional requirements of the district in which the lot is located. The following regulations must apply to any nonconforming lot:

(1) *Use of nonconforming lot.* Any nonconforming lot must be used only for a use permitted in the district in which it is located.

(2) *Single lot of record.* A principal structure and customary accessory structures may be erected on any single lot of record at the effective date of adoption or amendment of this chapter, notwithstanding limitations imposed by other provisions of this chapter. Such lot must be in separate ownership and not of continuous frontage with other lots in the same ownership. This provision must apply even though such lot fails to meet the requirements for area or width or both, that are generally applicable in the district, provided that yard setback dimensions and requirements other than those applying to area or width of the lot

Draft 03-14-2015

must conform to the regulations for the district in which such lot is located. However, no more than one dwelling unit must occupy any lot except in conformance with the provisions of this chapter for required lot area for each dwelling unit.

(3) *Variance from yard or other requirements.* If the use of a legal nonconforming lot requires a variation from any yard or other requirements, other than lot area or width, then such variance must be obtained from the Zoning Board of Appeals.

(4) *Contiguous lots in same ownership.* When two or more contiguous nonconforming lots or parts of nonconforming lots are in a single ownership at the time of, or subsequent to the adoption or amendment of this chapter, such lots must be considered to be a single lot for the purposes of this chapter, and no portion of such lot must be used, occupied, divided, or sold in any manner which would diminish compliance with minimum lot width and area requirements of this chapter.

(5) A nonconforming lot is not eligible for class A nonconforming designation.

Sec. 122-205. Nonconforming use of land.

(a) A nonconforming use of land occurs when property is used for a purpose or in a manner which was lawfully in existence before this chapter was adopted, but has become nonconforming under the terms of this chapter or its amendments.

(b) The nonconforming use of land not involving a building or structure, or in connection with which any building or structure thereon is incidental or accessory to the principal use of the land, may be continued subject to the regulations which follow:

(1) *Change.* The nonconforming use of land must not be changed to any other use except to a use permitted in the district in which the land is located.

(2) *Expansion.* A nonconforming use of land must not be expanded or extended beyond the area it occupies.

(3) *Moving.* No such nonconforming use must be moved in whole or in part to any other portion of the lot or parcel occupied by such use at the effective date of adoption or amendment of this chapter.

(4) *Change in occupancy or ownership.* A change in occupancy or ownership shall not constitute a change in use.

(5) *Abandonment.* If the nonconforming use of land is discontinued for a period of 365 consecutive days, where there is an intent demonstrated by the property owner to abandon the nonconforming use, such use shall not be renewed, and any subsequent use of the land must conform to the regulations of the district in which the land is located. A nonconforming use may be determined to be abandoned if the use has ceased and one (1) or more of the following conditions exist, that said condition(s) demonstrating intent on the part of the property owner to abandon the nonconforming use:

(a) One (1) or more utility meters, such as water, gas and electricity to the property, have been removed;

Draft 03-14-2013

(b) The property, buildings and/or grounds are unsafe or unsanitary, as described in Chapter 18, Article V;

(c) Cessation of business operations;

(d) Receipt of a written declaration by the property owner.

(e) Signs or other indications of the existence of the nonconforming use have been removed;

(f) Removal of equipment or fixtures that are necessary for the operation of the nonconforming use;

(g) Failure to maintain current licenses, certificates, permits, registrations or other appropriate documentation for the nonconforming use;

(h) Bank or tax foreclosure;

(i) Operation or maintenance of a permitted or different use at the property; or

(j) Other actions or omissions, which in the opinion of the Planning or Building Department(s), evidence an intention of the part of the property owner to abandon the nonconforming use.

(c) A nonconforming use of land is not eligible for class A nonconforming designation.

Sec. 122-206. Class B nonconforming uses of building.

The class B nonconforming use of a building, or building and lot in combination, may be continued subject to the following provisions:

(1) *Change in use.* The nonconforming use of a building may not be changed to a different use unless the new use is permitted in that same district. Any building, or building and lot in combination, in or on which a nonconforming use is replaced by a permitted use, must thereafter conform to the regulations of the district in which it is located and the nonconforming use may thereafter not be resumed.

a. A building or structure used for residential purposes which is nonconforming due to the number of dwelling units contained therein may only be changed so that the number of dwelling units is decreased, or so that the use is brought into conformity with this chapter.

b. Notwithstanding the above, a nonconforming use of a building or structure may be changed to another nonconforming use so that the degree of nonconformity is lessened when authorized by the planning commission after a public notice and hearing in accordance with section 122-164. In considering such authorization, the planning commission must consider the following:

Draft 03-14-2015

1. Whether the proposed use is equally or more appropriate than the present nonconforming zoning district in which the building, structure or land is located. No change to a less appropriate use may be authorized by the planning commission.

2. Whether the proposed use will interfere to a lesser extent with the use of adjoining lands or other properties in the surrounding neighborhood for the uses for which they have been zoned pursuant to the provisions of this chapter.

3. The effect of the proposed use on adjoining lands and the surrounding neighborhood.

4. In permitting such change, the planning commission may require appropriate conditions and safeguards in accord with the purpose and intent of this chapter.

5. Where a nonconforming use of a structure, or structure and land, is hereafter changed to a more conforming use, it must not thereafter be changed to a less conforming use.

(2) *Expansion of class B nonconforming use.*

a. The nonconforming use of any part of a building or structure must not be expanded or extended into any other portion of such building or structure.

b. No visible structural alteration must be made to the building or structure devoted to a nonconforming use, except repairs and maintenance work which are required to keep such building in sound condition or as required by law.

c. An existing structure containing a nonconforming use shall not be enlarged, constructed, reconstructed, moved or structurally altered or extended, unless the use is changed to a use which is permitted in the district in which the structure is located.

(3) *Change in occupancy or ownership.* A change of occupancy or ownership shall not constitute a change in use.

(4) *Removal or destruction.* If a building or structure in which a nonconforming use is being conducted is removed, destroyed, or severely damaged to the extent that the cost of restoration of the structure exceeds 100 percent of the state equalized value (SEV) or 50 percent of a higher value established by the most recent appraisal of the structure exclusive of the foundation and land, the nonconforming use shall not be renewed, and any subsequent use of the premises must conform to the use regulations of the district in which the premises are located. Single-family homes on individual lots that are considered a non-conforming use in the NC, Neighborhood Corridor Zoning District, shall be allowed to be rebuilt regardless of the amount of damage done to the structure so long as the rebuilt building is not enlarged or expanded.

For the purpose of calculating a fair and equitable cost of restoration regulated by this section, the average of two bid estimates from licensed contractors must be used. All work requiring permits under state and local regulations, and materials necessary to bring the structure up to current code must be included. Clean up costs, demolition, furnishings, appliances, and site work, i.e. landscaping, fencing, paving, shall not be included. The actual repair and reconstruction may be done by the owner or contractor of his or her choice.

Draft 05-14-2015

(5) Abandonment. If the nonconforming use of land is discontinued for a period of 365 consecutive days, where there is an intent demonstrated by the property owner to abandon the nonconforming use, it must not thereafter be renewed, and any subsequent use of the land must conform to the regulations of the district in which the land is located. A nonconforming use must be determined to be abandoned if the use has ceased and one (1) or more of the following conditions exist, that said condition(s) being deemed to demonstrate intent on the part of the property owner to abandon the nonconforming use:

(a) One (1) or more utility meters, such as water, gas and electricity to the property, have been removed;

(b) The property, buildings and/or grounds are unsafe or unsanitary, as described in Chapter 18, Article V;

(c) Cessation of business operations;

(d) Receipt of a written declaration by the property owner.

(e) Signs or other indications of the existence of the nonconforming use have been removed;

(f) Removal of equipment or fixtures that are necessary for the operation of the nonconforming use;

(g) Failure to maintain current licenses, certificates, permits, registrations or other appropriate documentation for the nonconforming use;

(h) Bank or tax foreclosure;

(i) Operation or maintenance of a permitted use or different use at the property; or

(j) Other actions or omissions, which in the opinion of the Planning or Building Department(s), evidence an intention of the part of the property owner to abandon the nonconforming use.

Sec. 122-207. Class B nonconforming structures.

(a) A nonconforming building or structure is a structure which was lawful on the effective date of adoption or amendment of this chapter, but which does not conform to the new chapter regulations for building type, lot area, lot area per dwelling unit, lot width, lot coverage, floor area, height, screening, off-street parking, loading space, yard, or other requirements of the zoning district in which it is located.

(b) Nonconforming buildings and structures may be re-used and occupied by new owners or tenants if all requirements of this Chapter are met and the restrictions below are met.

(c) Nonconforming buildings and structures must be subject to the following restrictions:

Draft 03-14-2015

(1) *Expansion.* Nonconforming structures may be expanded only in compliance with the following regulations:

a. All nonconforming structures, in any zoning district, may only be expanded in such a way that does not increase a non-conforming characteristic. All expansions must meet all requirements of the zoning district in which it is located, including lot coverage, heights, yard requirements, and off-street parking. A non-conforming building type may not be expanded.

(2) *Alterations.* A nonconforming structure may be altered to decrease its nonconformity.

(3) *Moving.* A nonconforming structure which is moved within a site or to another site must conform to the regulations of the district in which it is located.

(4) Removal or destruction. If a nonconforming structure is removed, destroyed, or severely damaged to the extent that the cost of restoration of the structure exceeds 100 percent of the state equalized value (SEV) or 50 percent of a higher value established by the most recent appraisal of the structure exclusive of the foundation and land, the nonconforming structure shall not be rebuilt, and any subsequent structure must conform to the regulations of the district in which the premises are located.

OR

(4) *Damage and removal.* A nonconforming structure which is damaged by any means may be restored to its original conditions and location prior to such damage, provided such construction is completed within 18 months of the date of damage and is diligently pursued to completion. Failure to complete reconstruction must result in the loss of legal, nonconforming status.

(5) *Restoration or repair.*

a. All repairs and maintenance work required to keep a nonconforming building in sound condition may be made, but such structure must not be structurally altered in a way inconsistent with the description and purpose of this article.

b. If a nonconforming structure or a structure housing a nonconforming use becomes physically unsafe or unlawful or poses a threat to the public health, safety, and welfare due to a lack of repairs or maintenance, the structure must be declared by the building department to be unsafe or unlawful by reason of physical condition. Such structure must not thereafter be restored, repaired, or rebuilt except in conformity with the provisions of this chapter.

(6) Restoration of Historic Structures. Restoration may be permitted of a legal nonconforming structure, designated as historic by the Ypsilanti Historic District Commission, which has been destroyed or abandoned (as defined in this section 122-206) provided the Planning Commission finds all of the following provisions are met:

(a) The approved design of the restored building maintains the same design and historical character it had prior to the destruction or abandonment; or, in the case of a building

Draft 03-14-15

that had been altered prior to destruction or abandonment, that the restored building more closely parallels the design of the original historic structure.

(b) All reasonable attempts at eliminating or reducing the nonconforming nature of the structure have been considered and are implemented in the restoration project.

Sec. 122-208. Class A nonconforming uses of buildings.

Nonconforming uses of buildings shall be designated class A providing that the planning commission finds all of the following exists with respect to the use or structure:
(1) The use of structure was lawful at its inception.

(2) The decision to continue the nonconforming use, if granted, will not alter the essential character of the area or neighborhood.

(3) Continuance of the use or structure would not be contrary to the public health, safety, or welfare or the spirit of the chapter.

(4) No useful purpose would be served by strict application of the provisions of this chapter with which the use or structure does not conform.

(5) Nonconforming uses of buildings are subject to the following restrictions:

(1) *Change in use.* The nonconforming use of a building may not be changed to a different use unless the new use is permitted in that same district. Any building, or building and lot in combination, in or on which a nonconforming use is replaced by a permitted use, must thereafter conform to the regulations of the district in which it is located and the nonconforming use may thereafter not be resumed.

a. A building or structure used for residential purposes which is nonconforming due to the number of dwelling units contained therein may only be changed so that the number of dwelling units is decreased, or so that the use is brought into conformity with this chapter.

b. Notwithstanding the above, a nonconforming use of a building or structure may be changed to another nonconforming use so that the degree of nonconformity is lessened when authorized by the planning commission after a public notice and hearing in accordance with section 122-164. In considering such authorization, the planning commission must consider the following:

1. Whether the proposed use is equally or more appropriate than the present nonconforming zoning district in which the building, structure or land is located. No change to a less appropriate use may be authorized by the planning commission.

2. Whether the proposed use will interfere to a lesser extent with the use of adjoining lands or other properties in the surrounding neighborhood for the uses for which they have been zoned pursuant to the provisions of this chapter.

3. The effect of the proposed use on adjoining lands and the surrounding neighborhood.

4. In permitting such change, the planning commission may require appropriate conditions and safeguards in accord with the purpose and intent of this chapter.

Draft 03-14-2015

5. Where a nonconforming use of a structure, or structure and land, is hereafter changed to a more conforming use, it must not thereafter be changed to a less conforming use.

(4) Removal or destruction. If a class A nonconforming structure is destroyed, or severely damaged , it may be restored in conformance with the plans submitted when the status was conferred.

(5) This designation shall run with the land.

Sec. 122-209. Class A conditions.

The decision to grant a class A designation shall be made by the Planning Commission in writing setting forth its findings of fact and basis for the designation. Only multiple family dwellings and/or group residence uses in R1 and CN-Mid shall be eligible for this designation. For changes or improvements to a class A use, site plans shall be required. and, and

(1) Application. An application for class A nonconforming status shall be filed with the city planner's office by the record owner of the property in question or by a person authorized to act on the record owner's behalf. The application shall consist of a completed application form, fee, and the following information:

(a) Name, address, and telephone number of the applicant and property owner; and the interest of the applicant in the property.

(b) Legal description, address, and tax parcel number of the subject property.

(c) An accurate, scaled drawing of the property, showing all property lines and dimensions correlated with the legal description; the location and dimensions of all existing and proposed structures and uses on the property; any roads, alleys, easements, drains, or waterways which traverse or abut the property; and the lot area and setback dimensions necessary to show compliance with the regulations of this chapter. In most cases, a site plan or survey will meet this requirement.

(d) Other reasonable information deemed necessary by the Planning Commission in order to make a proper decision.

(e) No application for Class A designation shall be accepted after such time as the building has been destroyed as described in 122-206(4)or the use abandoned as described in 122-206(5)

(2) Conditions. the Planning Commission may condition its approval on the following:

a. Screening and landscaping in keeping with community standards to ensure compatibility with adjacent uses.

b. Restrictions on lighting, noise, or visual impact.

c. Signage must comply with current zoning district requirements. Existing nonconforming signs may be required to be eliminated or reduced in size and number.

d. Replacement of a building must not create a more nonconforming yard setback condition which would impact on conforming properties in the immediate vicinity.

e. Other reasonable safeguards and improvements may be imposed by the Planning Commission to protect conforming uses in the surrounding area.

Draft 03-4-2015

(2) *Procedure.* by the following procedure, the Planning Commission shall assure the public health, safety or welfare or the spirit and purpose of this chapter:

a. A class A designation shall be deemed temporary until the planning commission has received written verification from the building official that the party requesting the class A designation has complied with all of the conditions set forth by the Planning Commission.

b. Once the Planning Commission has received written verification from the building director that the party requesting the class A designation has complied with said conditions, the class A designation shall become final, subject to other provisions of this chapter as hereafter prescribed.

c. No class A nonconforming use shall be resumed if it has been abandoned as defined in section 122-205(b)(5). No class A nonconforming use shall be used, altered, or enlarged in violation of any conditions imposed in its designation.

d. A temporary class A nonconforming use designation shall be void after six months if any conditions imposed by the designation remain outstanding, unless the planning commission grants a written request for an extension of six months. No more than two extensions may be granted.

Sec. 122-210. Acquisition of nonconformities.

The city may acquire private property to remove a nonconformity, as provided in Act No. 207 of the Public Acts of Michigan of 1921 (MCL 125.581 et seq., MSA 5.2931 et seq.), as amended.

Sec. 122-211. Building or structure under construction on effective date of the ordinance from which this chapter is derived.

Any building or structure must be considered existing and lawful for the purposes of this article if, on the effective date of the ordinance from which this chapter is derived, a building permit has been obtained therefore, if required; or if no building permit is required, a substantial start has been made toward construction and construction is thereafter pursued diligently to conclusion.

Sec. 122-212. Unlawful nonconformities.

(a) No nonconformity shall be permitted to continue in existence if it was unlawful at the time it was established.

(b) The city shall maintain records of nonconforming uses and structures as accurate as is feasible for determining legal nonconforming uses and structures in existence on the effective date of the ordinance from which this chapter is derived. However, failure on the part of a property owner to provide the city with necessary information to determine legal nonconforming status may result in denial of a required or requested permit.

Draft 03-14-2015

ARTICLE VI.
NONCONFORMING USES, BUILDINGS, STRUCTURES OR LOTS*

***State law reference(s)--**Nonconforming uses and structures, MCL 125.583a, MSA 5.2933(1).

Sec. 122-201. Description and purpose.

Certain existing lots, structures, buildings and uses of lots and structures were lawful before this chapter was adopted, but have become nonconformities under the terms of this chapter and its amendments. It is the intent of this chapter to permit such nonconformities to remain until they are abandoned or removed, but not to encourage their survival or, where abandonment or removal is not feasible, to gradually upgrade such nonconformities to conforming status. Nonconformities must not be enlarged, expanded, or extended, except as provided in this chapter and must not be used as grounds for adding other structures and uses of lots and structures which are prohibited. Nonconformities are declared by this chapter to be incompatible with the structures and uses permitted in the various districts.

Sec. 122-202. Authority to continue nonconforming uses and structures.

Any nonconforming use, building, structure, or lot which existed lawfully at the time of the adoption of the ordinance from which this chapter derives and which remains nonconforming and any such use, building, structure or lot which must become nonconforming upon the adoption of this article, or of any subsequent amendments thereto, may be continued, subject to the regulations in this article.

Sec. 122-203. Nonconforming lots.

A nonconforming lot is a lot of record or a lot described in a deed or land contract existing at the effective date of the ordinance from which this chapter derives that does not meet the minimum area or lot dimensional requirements of the district in which the lot is located. The following regulations must apply to any nonconforming lot:

(1) *Use of nonconforming lot.* Any nonconforming lot must be used only for a use permitted in the district in which it is located.

(2) *Single lot of record.* A principal structure and customary accessory structures may be erected on any single lot of record at the effective date of adoption or amendment of this chapter, notwithstanding limitations imposed by other provisions of this chapter. Such lot must be in separate ownership and not of continuous frontage with other lots in the same ownership. This provision must apply even though such lot fails to meet the requirements for area or width or both, that are generally applicable in the district, provided that yard setback dimensions and requirements other than those applying to area or width of the lot must conform to the regulations for the district in which such lot is located. However, no more than one dwelling unit must occupy any lot except in conformance with the provisions of this chapter for required lot area for each dwelling unit.

(3) *Variance from yard or other requirements.* If the use of a legal nonconforming lot requires a variation from any yard or other requirements, other than lot area or width, then such variance must be obtained only through action by the zoning board of appeals.

(4) *Contiguous lots in same ownership.* When two or more contiguous nonconforming lots or parts of nonconforming lots are in a single ownership at the time of, or subsequent to the adoption or amendment of this chapter, such lots must be considered to be a single lot for the purposes of this chapter, and no portion of such lot must be used, occupied, divided, or sold in any manner which would diminish compliance with minimum lot width and area requirements of this chapter.

Sec. 122-204. Nonconforming use of land.

(a) A nonconforming use of land occurs when property is used for a purpose or in a manner which was lawfully in existence before this chapter was adopted, but has become nonconforming under the terms of this chapter or its amendments.

(b) The nonconforming use of land not involving a building or structure, or in connection with which any building or structure thereon is incidental or accessory to the principal use of the land, may be continued subject to the regulations which follow:

(1) *Change.* The nonconforming use of land must not be changed to any other use except to a use permitted in the district in which the land is located.

(2) *Expansion.* A nonconforming use of land must not be expanded or extended beyond the area it occupies.

(3) *Moving.* No such nonconforming use must be moved in whole or in part to any other portion of the lot or parcel occupied by such use at the effective date of adoption or amendment of this chapter.

(4) *Change in occupancy or ownership.* A change in occupancy or ownership must not constitute a change in use.

(5) *Abandonment.* If the nonconforming use of land is abandoned for a period of 365 consecutive days, where there is an intent demonstrated by the property owner to abandon the nonconforming use, it must not thereafter be renewed, and any subsequent use of the land must conform to the regulations of the district in which the land is located. A nonconforming use must be determined to be abandoned if the use has ceased and one (1) or more of the following conditions exist, that said condition(s) being deemed to demonstrate intent on the part of the property owner to abandon the nonconforming use:

(a) One (1) or more utility meters, such as water, gas and electricity to the property, have been removed;

(b) The property, buildings and/or grounds are unsafe or unsanitary, as described in Chapter 18, Article V;

(c) Cessation of business operations;

(d) Receipt of a written declaration by the property owner.

(e) Signs or other indications of the existence of the nonconforming use have been removed;

(f) Removal of equipment or fixtures that are necessary for the operation of the nonconforming use;

(g) Failure to maintain current licenses, certificates, permits, registrations or other appropriate documentation for the nonconforming use;

(h) Bank or tax foreclosure;

(i) Operation or maintenance of a permitted use at the property; or

(j) Other actions or omissions, which in the opinion of the Planning or Building Department(s), evidence an intention of the part of the property owner to abandon the nonconforming use.

Sec. 122-205. Nonconforming uses of buildings or structures.

The nonconforming use of a building or structure, or structure and lot in combination, may be continued subject to the following provisions:

(1) *Change in use.* The nonconforming use of a building or structure may not be changed to a different use unless the new use is permitted in that same district. Any structure, or structure and lot in combination, in or on which a nonconforming use is replaced by a permitted use, must thereafter conform to the regulations of the district in which it is located and the nonconforming use may thereafter not be resumed.

a. A building or structure used for residential purposes which is nonconforming due to the number of dwelling units contained therein may only be changed so that the number of dwelling units is decreased, or so that the use is brought into conformity with this chapter.

b. Notwithstanding the above, a nonconforming use of a building or structure may be changed to another nonconforming use so that the degree of nonconformity is lessened when authorized by the Planning Commission after a public notice and hearing in accordance with section 122-164. In considering such authorization, the Planning Commission must consider the following:

1. Whether the proposed use is equally or more appropriate than the present nonconforming zoning district in which the building, structure or land is located. No change to a less appropriate use may be authorized by the Planning Commission.

2. Whether the proposed use will interfere with the use of adjoining lands or other properties in the surrounding neighborhood for the uses for which they have been zoned pursuant to the provisions of this chapter.

3. The effect of the proposed use on adjoining lands and the surrounding neighborhood.

4. In permitting such change, the Planning Commission may require appropriate conditions and safeguards in accord with the purpose and intent of this chapter.

5. Where a nonconforming use of a structure, or structure and land, is hereafter changed to a more conforming use, it must not thereafter be changed to a less conforming use.

(2) *Expansion of nonconforming use.*

a. The nonconforming use of any part of a building or structure must not be expanded or extended into any other portion of such building or structure.

b. No visible structural alteration must be made to the building or structure devoted to a nonconforming use, except repairs and maintenance work which are required to keep such building in sound condition or as required by law.

c. An existing structure containing a nonconforming use must not be enlarged, constructed, reconstructed, moved or structurally altered or extended, unless the use is changed to a use which is permitted in the district in which the structure is located.

(3) *Change in occupancy or ownership.* A change of occupancy or ownership must not constitute a change in use.

(4) *Removal or destruction.* If a building or structure in which a nonconforming use is being conducted is removed, destroyed, or severely damaged to the extent that the cost of restoration of the structure exceeds 100 percent of the state equalized value (SEV) or 50 percent of a higher value established by the most recent appraisal of the structure exclusive of the foundation and land, the nonconforming use must not be renewed, and any subsequent use of the premises must conform to the use regulations of the district in which the premises are located. Single-family homes on individual lots that are considered a non-conforming use in the Neighborhood Corridor Zoning District must be allowed to be rebuilt regardless of the amount of damage done to the structure.

For the purpose of calculating a fair and equitable cost of restoration regulated by this section, the average of two bid estimates from licensed contractors must be used. All work requiring permits under state and local regulations, and materials necessary to bring the structure up to current code must be included. Clean up costs, demolition, furnishings, appliances, and site work, i.e. landscaping, fencing, paving, must not be included. The actual repair and reconstruction may be done by the owner or contractor of his or her choice.

(5) Abandonment. If the nonconforming use of land is abandoned for a period of 365 consecutive days, where there is an intent demonstrated by the property owner to abandon the nonconforming use, it must not thereafter be renewed, and any subsequent use of the land must conform to the regulations of the district in which the land is located. A nonconforming use must be determined to be abandoned if the use has ceased and one (1) or more of the following conditions exist, that said condition(s) being deemed to demonstrate intent on the part of the property owner to abandon the nonconforming use:

(a) One (1) or more utility meters, such as water, gas and electricity to the property, have been removed;

(b) The property, buildings and/or grounds are unsafe or unsanitary, as described in Chapter 18, Article V;

(c) Cessation of business operations;

(d) Receipt of a written declaration by the property owner.

(e) Signs or other indications of the existence of the nonconforming use have been removed;

(f) Removal of equipment or fixtures that are necessary for the operation of the nonconforming use;

(g) Failure to maintain current licenses, certificates, permits, registrations or other appropriate documentation for the nonconforming use;

(h) Bank or tax foreclosure;

(i) Operation or maintenance of a permitted use at the property; or

(j) Other actions or omissions, which in the opinion of the Planning or Building Department(s), evidence an intention of the part of the property owner to abandon the nonconforming use.

Sec. 122-206. Nonconforming buildings or structures.

(a) A nonconforming building or structure is a structure which was lawful on the effective date of adoption or amendment of this chapter, but which does not conform to the new chapter regulations for building type, lot area, lot area per dwelling unit, lot width, lot coverage, floor area, height, greenbelts or screening, off-street parking, loading space, yard, or other requirements of the zoning district in which it is located.

(b) Nonconforming buildings and structures may be re-used and occupied by new owners or tenants if all requirements of this Chapter are met and the restrictions below are met.

(c) Nonconforming buildings and structures must be subject to the following restrictions:

(1) *Expansion.* Nonconforming structures may be expanded only in compliance with the following regulations:

a. All nonconforming structures, in any zoning district, may only be expanded in such a way that does not increase a non-conforming characteristic. All expansions must meet all requirements of the zoning district in which it is located, including lot coverage, heights, yard requirements, and off-street parking. A non-conforming building type may not be expanded.

(2) *Alterations.* A nonconforming structure may be altered to decrease its nonconformity.

(3) *Moving.* A nonconforming structure which is moved within a site or to another site must thereafter conform to the regulations of the district in which it is located.

(4) *Damage and removal.* A nonconforming structure which is damaged by any means may be restored to its original conditions and location prior to such damage, provided such construction is completed within 18 months of the date of damage and is diligently pursued to completion. Failure to complete reconstruction must result in the loss of legal, nonconforming status.

(5) *Restoration or repair.*

a. All repairs and maintenance work required to keep a nonconforming building or structure in sound condition may be made, but such building or structure must not be structurally altered in a way inconsistent with the description and purpose of this article.

b. If a nonconforming structure or a structure housing a nonconforming use becomes physically unsafe or unlawful or poses a threat to the public health, safety, and welfare due to a lack of repairs or maintenance, the structure must be declared by the building department to be unsafe or unlawful by reason of physical condition. Such structure must not thereafter be restored, repaired, or rebuilt except in conformity with the provisions of this chapter.

(6) Restoration of Historic Structures. Restoration may be permitted of a legal nonconforming structure, designated as historic by the Ypsilanti Historic District Commission, which has been destroyed or abandoned (as defined in section 122-205) provided the Planning Commission finds all of the following provisions are met:

a. The approved design of the restored building maintains the same design and historical character it had prior to the destruction or abandonment; or, in the case of a building that had been altered prior to destruction or abandonment, that the restored building more closely parallels the design of the original historic structure.

b. All reasonable attempts at eliminating or reducing the nonconforming nature of the structure have been considered and will be implemented in the restoration project.

Sec. 122-207. Acquisition of nonconformities.

The city may acquire private property to remove a nonconformity, as provided in Act No. 207 of the Public Acts of Michigan of 1921 (MCL 125.581 et seq., MSA 5.2931 et seq.), as amended.

Sec. 122-208. Building or structure under construction on effective date of the ordinance from which this chapter is derived.

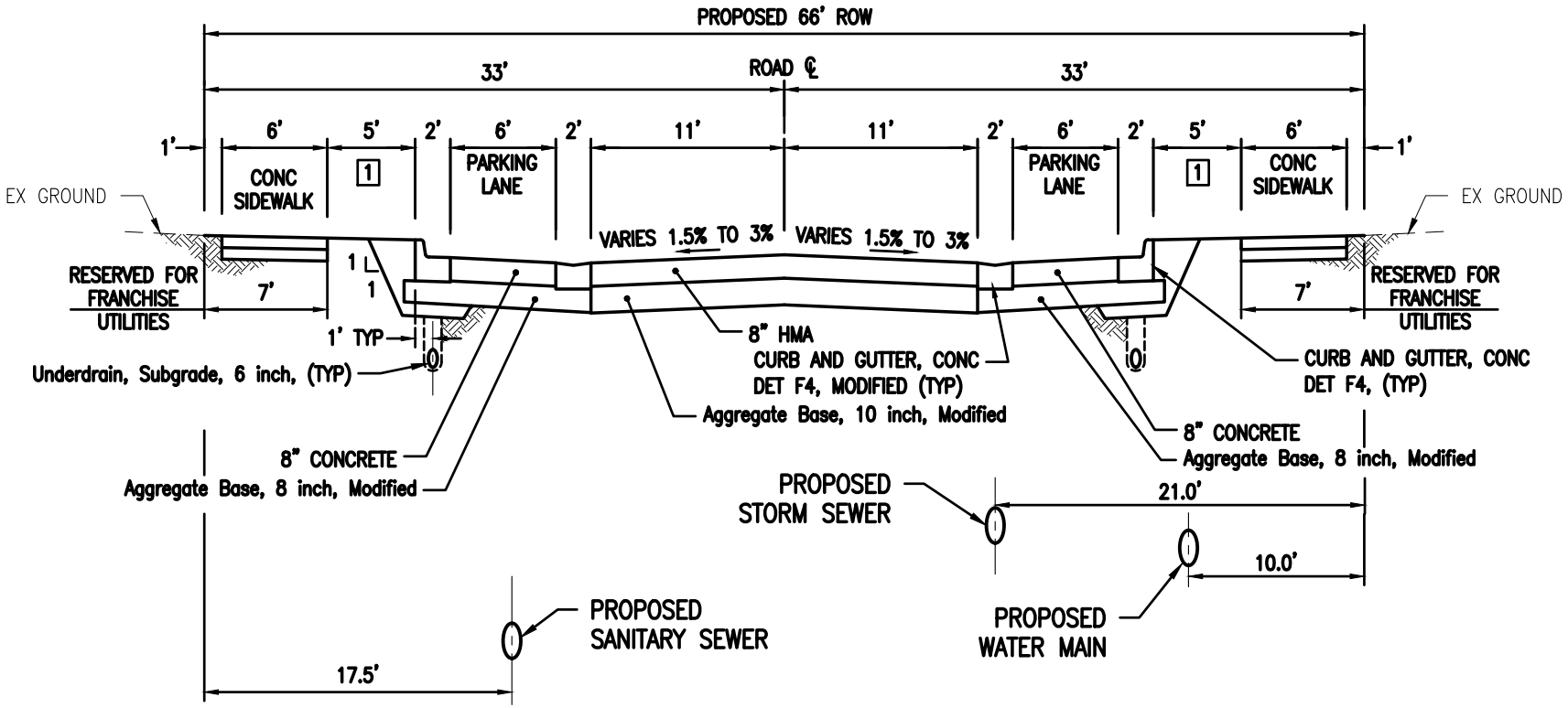
Any building or structure must be considered existing and lawful for the purposes of this article if, on the effective date of the ordinance from which this chapter is derived, a building permit has been obtained therefore, if required; or if no building permit is required, a substantial start has been made toward construction and construction is thereafter pursued diligently to conclusion.

Sec. 122-209. Unlawful nonconformities.

(a) No nonconformity must be permitted to continue in existence if it was unlawful at the time it was established.

(b) The city must maintain records of nonconforming uses and structures as accurate as is feasible for determining legal nonconforming uses and structures in existence on the effective date of the ordinance from which this chapter is derived. However, failure on the part of a property owner to provide the city with necessary information to determine legal nonconforming status may result in denial of a required or requested permit.

Secs. 122-210--122-230. Reserved.



A & B STREET – PARKING SECTION

[1] GRASS OR HARDSCAPE AS DETERMINED BY CITY (TYP)

WATER STREET DEVELOPMENT

TYPICAL ROAD CROSS SECTIONS

SCALE
H: 1" = 10' V: N.T.S.

SHEET
1
OF 3

CLIENT:
CITY OF YPSILANTI

JOB #
0094-13-0060

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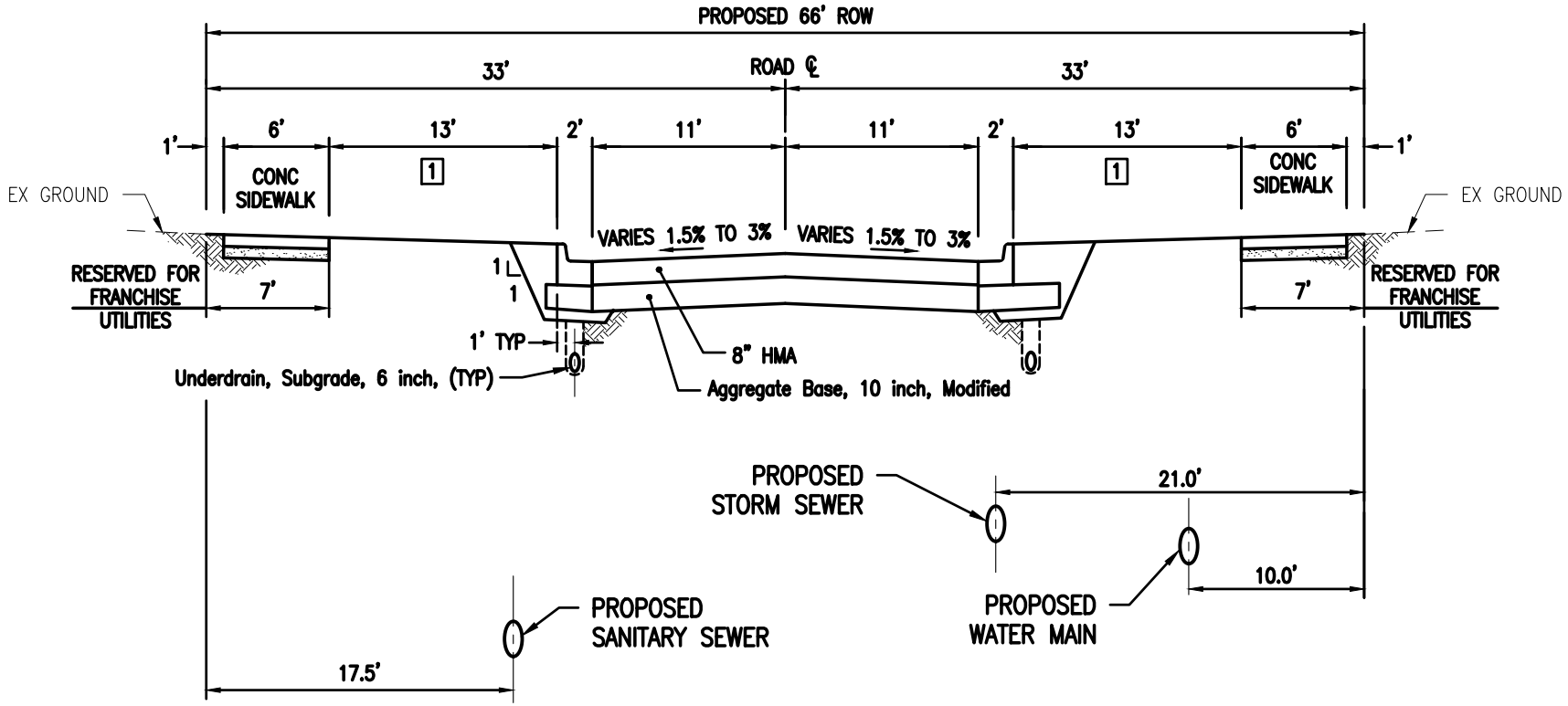

A & B STREET – NO PARKING SECTION

[1] GRASS OR HARDSCAPE AS DETERMINED STREET BY CITY (TYP)

WATER STREET DEVELOPMENT

TYPICAL ROAD CROSS SECTIONS

SCALE H: 1" = 10' V: N.T.S.

SHEET 2 OF 3

CLIENT: CITY OF YPSILANTI

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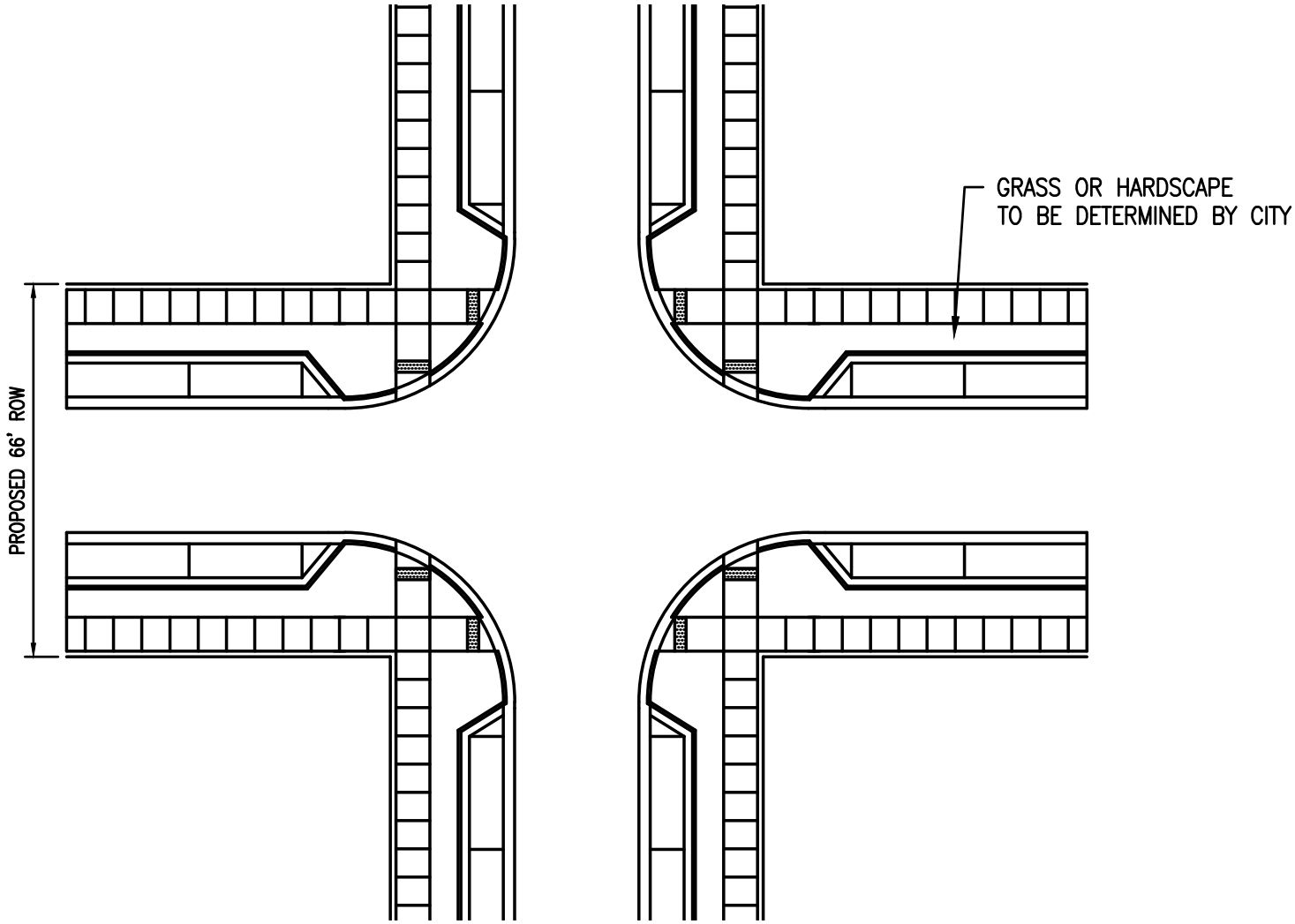

A & B STREET INTERSECTION – PLAN VIEW

WATER STREET DEVELOPMENT

TYPICAL INTERSECTION GEOMETRY

SCALE
H: 1" = 30' V: N.T.S.

SHEET
3
OF 3

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City of Ypsilanti

Community & Economic Development Department

Memo

To: Planning Commission

From: Bonnie Wessler, Acting Planner II

Date: 14 March 2015

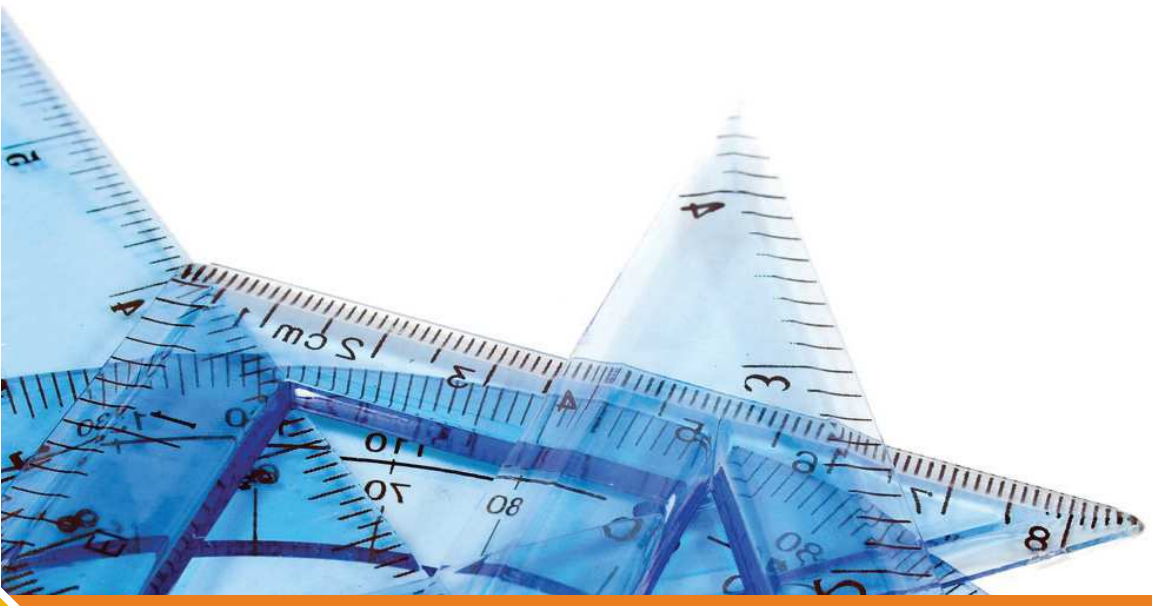
Subject: Engineering Standards

During the Redevelopment Ready Certification process, it was brought to staff attention that the City had not adopted Engineering Standards that were readily available to developers. OHM has worked to provide documentation of procedures and standards already in place, to provide clarity to applicants as to what is expected during the development process.

Planning Commission is asked to review the attached Engineering Design Standards and Site Development Procedures Manual and to provide feedback. Note that it provides clarity on several aspects of the development process, including timing, and largely reflects the processes and standards currently in place. One new item is included, and that is the requirement of a performance bond prior to construction. Planning Commission input and discussion is welcomed particularly on this provision.

City of Ypsilanti

Engineering Design Standards and Site Development Procedures Manual



MARCH 2015

architects. engineers. planners.

OHM Advancing Communities

TABLE OF CONTENTS

I. GENERAL REQUIREMENTS AND PROCEDURES 1

A. Title and Purpose 1
B. Definitions 1
C. Compliance with Ordinances and Public Acts 2
D. Standard Details 2
E. General Project Review Procedures 3
F. Engineering Requirements for Site Plans 4
G. Engineering Requirements for Detailed Engineering Plans (Construction Plans) 4
H. Permit Requirements 4
I. Fees and Escrow Requirements 6
J. Insurance 8
K. Pre-Construction Meeting 10
L. Construction Observation 10
M. Bonds 11
N. Easements 11
O. Project Completion/Final Acceptance 12

II. GENERAL REQUIREMENTS FOR ENGINEERING REVIEWS 14

A. General Procedures 14
B. General Plan Requirements 15

III. SOIL EROSION 17

A. Sites Requiring Permits 17
B. Intent of Permit 17
C. Plan Requirements 17
D. Construction Observation 17

IV. TOPOGRAPHY 18

A. General 18

V. GRADING 19

A. General 19

VI. PAVING 21

A. General: 21
B. Public Roads: 22
C. Private Roads: 22
D. Parking Lot Pavements (Non-industrial): 23
E. Industrial Parking Lots: 23
F. Sidewalks: 23
G. Driveways: 24

VII. STORM SEWER AND DETENTION BASIN 25

A. General 25
B. Structure 25

C. Storm Sewer Design 26
D. Plan and Profile: 28
E. Taps 28
F. Detention 28
G. Retention 30
H. Public Storm Sewer 30
I. Materials: Storm Sewer 30

VIII. WATER MAIN 32

A. Per YCUA Standards 32

IX. SANITARY SEWER 32

A. Per YCUA Standards 32

Appendices

A. Checklists

Detailed Engineering Plan Review Checklist
Pre-Construction Meeting Minutes

B. Bonds and Maintenance Documents

Maintenance and Guarantee Bond - Site Development

C. Sample Easements

Sample Public Utility Easement

D. Certifications – Grading – Stormwater Outlet

City of Ypsilanti Site Grading/Setback Certification
Certificate of Stormwater Outlet

E. Washtenaw County Design Standards Appendices

Washtenaw County authored documents are available at the County's website. It is the applicant's responsibility to verify the most current version of the documents at:

http://www.ewashtenaw.org/government/drain_commissioner/dc_webPermits_DesignStandards/dc_Rules

I. General Requirements and Procedures

A. Title and Purpose

These guidelines shall be known and may be cited as the City of Ypsilanti Engineering Design and Construction Standards. The intent of this manual is to establish minimum engineering requirements for the design and construction of improvements within the City of Ypsilanti.

B. Definitions

The following words, terms and phrases, when used in this manual, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

AASHTO:
American Association of State Highway and Transportation Officials

ANSI:
American National Standards Institute

ASTM:
American Society for Testing and Materials

AWWA:
American Water Works Association

CITY:
The City of Ypsilanti, Michigan

CITY ENGINEER:
The consulting engineers or staff engineers employed by the City of Ypsilanti.

DETENTION POND:
An open water facility used to manage and control storm water flows leaving a site via an engineered controlled outlet.

DPS:
City of Ypsilanti Department of Public Services

EASEMENT:
The right of an owner of property by reason of such ownership, to use the property of another for purposes of ingress, egress, utilities, drainage and similar uses.

GLUMRB:
Recommended Standards for Sewage Services, (Ten States Standards); standards for use as a guide in the design and preparation of plans and specifications for sewage services, prepared by the Standards Committee of the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers.

MDEQ:
Michigan Department of Environmental Quality

MDOT:
Michigan Department of Transportation

MDPH:
Michigan Department of Public Health

MIOSHA:
Michigan Occupational Safety and Health Act

P&D:
City of Ypsilanti Planning and Development Department

STANDARD DETAILS DRAWINGS (SDD):
Refers to the City of Ypsilanti and YCUA Standard Details Drawings for water mains, storm sewers, sanitary sewers and soil erosion adopted by the City. They are considered a part of these standards.

WCRC:
Washtenaw County Road Commission

YCUA:
Ypsilanti Communities Utility Authority

ZBA:
The City of Ypsilanti Zoning Board of Appeals

C. Compliance with Ordinances and Public Acts

All construction shall be in compliance with the procedural and substantive requirements of the Zoning Ordinance; Part 91 - Soil Erosion Control; the Land Division Act, Act No. 288 of the Public Acts of Michigan of 1967, the Condominium Act 59 of 1978, as Amended, the 2010 Americans with Disabilities Act standards including 28 CFR section 35.151 and 28 CFR part 36 App. A, the ADAAG, and all other applicable statutes and ordinances, in addition to the requirements contained in this manual.

D. Standard Details

All utilities described and contained in this manual shall be constructed in accordance with the City's and YCUA's "Standard Details Drawings" (SDD) which are included with this manual.

E. General Project Review Procedures

1. The project review and approval process generally consists of four phases. All must be completed before a project is accepted by the City.

   a. Phase I – Site Plan
   The first phase includes review of the site plan and concludes with approval of the site plan by the Planning Commission. This includes any site improvements, public and private utility installation, paving, and storm water management facilities.

   The applicant must contact the Planning and Development Department (P&D) for the required forms, fees and detailed explanation of the process. P&D will distribute the plans to the appropriate City departments and consultants who perform an engineering site plan review. The review of the site plan from an engineering standpoint, along with the associated fees and plan requirements is outlined herein.

   The second phase begins after the Planning Commission approves the plan and the City Planner signs off on the plans implementing all conditions of approval.

   b. Phase II – Engineering Plan
   Upon completion of the Site Plan phase, the developer submits detailed engineering plans and fees to the Planning and Development Department. P&D then distributes the engineering plans to the appropriate City departments and consultants who perform a detailed engineering plan review.

   Final approval of the plans will not be issued until all required permits are on file. The City of Ypsilanti Building Department will not issue any building permits until after all permits have been received, and the construction plans have been approved.

   c. Phase III – Building Department Review
   Building permit applications shall be obtained from the Building Department. The Building Department will not issue permits until the plans are approved for construction and a preconstruction meeting has been held.

   d. Phase IV – Construction
   The fourth phase begins after all permits are received and the plans have been approved for construction by the City Engineer and the Building Department. The construction phase begins with a preconstruction meeting, and ends with final acceptance of the project by the City of Ypsilanti, YCUA, and the Building Department.

2. Additional review steps are needed for single-family condominium and subdivision reviews per the City of Ypsilanti Zoning Ordinance.

F. Engineering Requirements for Site Plans

1. The applicant must follow the procedures of the Planning and Development Department in order to achieve site plan approval. Information on the submission deadlines and procedures must be obtained from the P&D Department.
   http://cityofypsilanti.com/planning

   The site plan submission shall include the level of engineering detail necessary to demonstrate conformance with these standards will be possible. The checklist included in Appendix A outlines the level of detail necessary on the detailed engineering plan submission, not necessarily the engineering site plan submission. It is the applicant's responsibility to provide the appropriate level of detail necessary to illustrate how the engineering requirements will be met.

   For example, providing rough storm water detention calculations and identifying the detention pond location and approximate size would be suitable for site plan review. Detailed calculations and grading plans are necessary for engineering plan review and approval.

2. Special engineering design considerations may also be addressed at this time.

G. Engineering Requirements for Detailed Engineering Plans (Construction Plans)

The Detailed Engineering Plan Review process is outlined in Section II of this manual. A checklist outlining the information that needs to be included on a Detailed Engineering Plan submittal is included in Appendix A.

H. Permit Requirements

Prior to commencing construction the applicant must obtain all required permits.

1. Building Permit:
   Before any construction can begin, a building permit must be obtained from the City of Ypsilanti. This permit will not be issued until construction plans have been approved by the Building Department, Department of Public Services, the City Engineer, and the Fire Department.
   http://cityofypsilanti.com/Government/Departments/BuildingDepartment

2. Soil Erosion and Sediment Control Permit:
Application and fee must be deposited with Washtenaw County. A permit from Washtenaw County for soil erosion is required before engineering plan approval.
http://www.ewashtenaw.org/government/drain_commissioner/dc_websoilerosion

3. City Right-of-Way Procedures and Fees Schedule:
   Anyone wishing to work in a City of Ypsilanti right-of-way must apply for and obtain an approval from the DPS. This includes, but is not limited to, driveway

construction and reconstruction and private utility work.

4. Michigan Department of Environmental Quality (Water Main):

   Construction of a public water main requires a construction permit from the Michigan Department of Environmental Quality as well as the approval of the City of Ypsilanti and YCUA. Projects meeting certain criteria may also require approval from the Detroit Water & Sewerage Department. The proprietor will submit four (4) sets of plans and detail sheets, signed and sealed by the Michigan registered professional civil engineer responsible for the preparation of plans and specifications. A completed MDEQ permit application must also be submitted. In addition, a tabulation of water mains consisting of their size, location, type and length will be prepared by the applicant's engineer and submitted to the City.

   A current MDEQ permit application can be found at http://www.michigan.gov/deq/.

5. Michigan Department of Environmental Quality (Sanitary):

   Construction of public sanitary sewer requires a construction permit from the MDEQ as well as the approval of the City of Ypsilanti and YCUA. The applicant will submit three (3) sets of plans and specifications signed and sealed by a professional civil engineer registered in the State of Michigan. In addition, design flow computations for the proposed sewers and a tabulation of the capacities of the proposed sewers and the existing outfall sewer will be submitted by the proprietor's engineer, as well as two (2) copies of the completed MDEQ permit application. The City Engineer will send three (3) sets of plans to YCUA and request approval for an MDEQ permit.

   A current MDEQ permit application can be found at http://www.michigan.gov/deq/

6. Washtenaw County Road Commission (Roads)

   All work in roads under the jurisdiction of Washtenaw County requires a permit from the Washtenaw County Permit Engineering Section.

7. Office of the Washtenaw County Water Resources Commissioner, (Storm Drainage):

   a. Connections to County Drains and Sewers:

      A Washtenaw County construction permit is required for any connection to a County drain. A Certificate of outlet will be required (See Appendix D).

   b. The City of Ypsilanti will require a certificate of outlet for all stormwater discharges. (See Appendix D).

8. Michigan Department of Environmental Quality (MDEQ) (Wetlands, Inland Lakes and Streams):

   It is the developer's responsibility to obtain MDEQ permits as required under Part 303 (Wetland Protection Permit) and Part 301 (Inland Lakes and Streams Permit).

   A current MDEQ permit application can be found at http://www.michigan.gov/deq/.

9. Other Permits:

   Other agencies from which the developer may need a permit must be designated on the approved plan. These permits are the applicant's responsibility and will be required prior to construction. Other possible agencies include, but are not limited to:

   Michigan Department of Environmental Quality – N.P.D.E.S.
   Michigan Department of Transportation
   Washtenaw County Health Department

I. Fees and Escrow Requirements

All escrows and fees must be submitted to the appropriate department prior to beginning any plan reviews. The fees and escrow amounts outlined in this document are for the City Engineer only. Additional fees from other City Departments and other permitting agencies may be required. The applicant is encouraged to contact the Planning and Development Department for a comprehensive schedule of City fees.

1. Engineering Site Plan Review Fee – paid to the Planning and Development Department
   a. This fee must be deposited with the P&D Department prior to site plan review. This fee is non-refundable and approval cannot be given without its receipt.
   b. Fees shall be paid in accordance with the Fee Schedule adopted by City Council.
   c. The initial fee covers two reviews. Additional reviews beyond the second review will require additional fees in accordance with the Fee Schedule.
2. Detailed Engineering Plan Review Fee – paid to the Planning and Development Department

a. The fee will be calculated in accordance with the Fee Schedule adopted by City Council. The fee is calculated based on the total construction cost of the project. The total construction costs calculation shall include grading/earthwork, water main, sanitary sewer, pavement, storm sewers and underground detention / detention basins. Construction costs inside the building footprint shall not be included.

b. An itemized, unit-cost cost estimate of the work activities listed above must be provided to the Planning and Development Department with the original engineering application and plan sets. This estimate must be signed and sealed by an engineer registered in the State of Michigan and must be approved by the City Engineer. The initial fee will be determined as a percentage of the estimate as detailed in the Fee Schedule. As part of the first review, the estimate will be reviewed for completeness and compared to average industry costs. If revisions to the estimate are required additional fees will apply.

c. The original review fee covers three plan reviews. If additional reviews are necessary, the applicant must submit additional payment. Additional payments must be posted with the next submittal to the Planning and Development Department. The review process will be put on hold until this payment is received.

d. All engineering reviews must be submitted to the Planning and Development Department for processing. The Planning and Development Department will forward plans to the City Engineer.

3. Soil Erosion Plan Review and Construction Observation Fee (Contact Washtenaw County).

4. Construction Observation Escrow – paid to the Planning and Development Department:
The construction escrow must be deposited prior to construction to cover the costs of City Construction Observation. The fee is based on the construction cost of all water mains, sanitary sewers, storm sewers, earthwork, paving and sidewalks that require engineering Construction Observation. The construction cost will be defined as either the signed contract for the work or a sealed engineer's itemized estimate for the work approved by the City Engineer.

   The initial escrow amount will be determined as a percentage of the estimate as detailed in the Fee Schedule. The construction escrow will be placed in an account and any unused monies will be refunded. If the construction escrow is not sufficient to cover the project costs, an additional deposit shall be required prior to the acceptance of the infrastructure by the City or issuance of a final certificate of occupancy.

5. Building Permit Fee – paid to the Building Department (contact Building Department).

J. Insurance

1. The CONTRACTOR, prior to commencing work, shall provide at their own cost and expense the following insurance to the CITY in insurance companies licensed and/or approved in the State of Michigan, which insurance shall be evidenced by certificates and/or policies as determined by the CITY. All policies and certificates of insurance shall be approved by the City Manager of the CITY prior to the inception of any work.

2. Each certificate or policy shall require that, thirty days prior to cancellation or material change in the policies, notice thereof shall be given to the CITY by registered mail, return receipt requested, for all of the following stated insurance policies. All such notices shall name the CONTRACTOR and identify the contract number.

3. All property losses shall be made payable to and adjusted with the CITY.

4. In order to determine financial strength and reputation of insurance carriers, all companies providing the coverages required shall be licensed or approved by the Insurance Bureau of the State in which the work is performed and shall have a financial rating not lower than XI and a policyholder's service rating no lower than B+ as listed in A.M. Best's Key Rating Guide, current edition. Certificates of insurance shall note A.M. Best's Rating. Companies with ratings lower than B+:XI will be acceptable only upon written consent of the CITY.

5. All policies and certificates of insurance of the CONTRACTOR shall contain the following clauses:
   a. The clause "other insurance provision" in a policy in which the CITY is named as an insured, shall not apply to the CITY.
   b. The insurance companies issuing the policy or policies shall have no recourse against the CITY (including its agents and agencies as aforesaid) for payment of any premiums or for assessments under any form of policy.
   c. Any and all deductibles in the above described insurance policies shall be assumed by and be for the account of, and at the sole risk of, the CONTRACTOR.
   d. The CITY (at its option) shall be listed as an Additional Named Insured on the following insurance coverages provided by the CONTRACTOR.

6. The CONTRACTOR shall maintain at its own expense the following insurance:

a. Worker's Compensation insurance with Michigan statutory limits and employers' liability insurance with minimum limits of $500,000 each accident.

b. General Liability insurance with a minimum limit of liability per occurrence of $1 Million Combined Single Limit (Bodily Injury/Property Damage), with no aggregate.
This insurance shall indicate on the Certificate of Insurance the following coverages:
(commercial general liability insurance) with limits of liability of not less than $1 Million ($1,000,000) per occurrence combined single limit, personal injury, bodily injury and property damage. Coverage shall include form general liability extensions or equivalent.
1) Premises - Operations
2) Independent Contractor and Subcontractors
3) Products and Completed Operations
4) Broad Form Contractual
5) Broad Form Liability Endorsement

c. Automobile Liability insurance with minimum limits of liability, per occurrence, of $1 Million Combined Single Limit (Bodily Injury/Property Damage) unless otherwise indicated in the "Special Conditions" of the Contract specifications. This insurance shall include for bodily injury and property damage the following coverages:
1) Owned automobiles
2) Hired automobiles
3) Non-owned automobiles

d. Protective Liability Insurance: Owners and Contractors. The CONTRACTOR shall provide the original and duplicate policy of insurance to the City Manager. This insurance contract shall name the CITY as the insured and remain in effect until the contract is accepted by the CITY.
The insurance shall provide minimum limits of liability per occurrence of $1 million ($1,000,000) Combined Single Limit. Said insurance shall provide that the term "Owner" or CITY shall be deemed to include all authorities, boards, bureaus, commissions, divisions, departments, districts and offices of the CITY and the individual members, employees and agents thereof, all elected and appointed officials and volunteers in their official capacities.

e. Construction Insurance: The CONTRACTOR at their own cost and expense shall provide and maintain the applicable construction insurance until the Contract is accepted by the CITY and/or its designee. This coverage shall be written for 100% of the completed value covering the CITY as the insured, with a deductible of not more than $1,000. The CONTRACTOR shall provide the original and duplicate policy to the CITY (unless the CITY shall accept, in lieu thereof, all contained endorsements including all applicable provisions and coverages).

f. Professional Services. CONTRACTOR shall provide professional liabilities (errors and omissions) insurance, with minimum limits of $1 Million ($1,000,000) each occurrence.

g. Disability Benefits: The CONTRACTOR shall provide proof of compliance with the Disability Benefits Law. (If applicable)

h. Additional insurance may be required on an individual basis for extra hazardous contracts and specific service agreements. If such additional insurance is required for a specific contract, that requirement will be described in the "Special Conditions" of the contract specifications.

7. Certificate of Insurance; required language. The Certificate of Insurance obtained by the CONTRACTOR shall contain the following language: "The City of Ypsilanti, Michigan, its elected officials, officers, employees, boards, commission, authorities, voluntary associations, and any other units operating under the jurisdiction of the City and within appointment of its operating budget, including the City of Ypsilanti, are named as additional insured, and such coverage shall be considered to be the primary coverage rather than any policies and insurance or self insurance retention owned or maintained by the City of Ypsilanti."
Additional Named Insured under Owners and Contractors Protective Liability and Property Damage Insurance will include the City of Ypsilanti; the Ypsilanti City Council, jointly and individually, and all City of Ypsilanti employees; the YCUA Board of Commissioners, jointly and individually; all YCUA employees, agents, and consultants, individually.

K. Pre-Construction Meeting

Prior to construction of any improvements, a pre-construction meeting will be scheduled by the applicant through the City Engineer to discuss the various project requirements. Prior to scheduling a pre-construction meeting, items such as insurance binders and permits must be on file. The owner, design engineer, underground contractor, paving contractor, and any other interested parties shall attend. Building Department permits will not be issued until a preconstruction meeting has been held.

See Appendix A for pre-construction meeting guidelines.

L. Construction Observation

1. Full-time Construction Observation shall be required during the construction of subdivisions, private utilities within public right-of-way, site plan improvements and utility systems and roads located within the City. Such construction and improvements shall include, but not be limited to, water mains, sanitary sewers, storm sewers, storm water holding facilities, street paving, driveway pavements and pumping stations. Observation personnel shall be provided by the City or the City Engineer. All estimated costs to be incurred for services must be paid prior to the start of construction by the proprietor, owner or developer of the project to be constructed. All costs incurred by the City for observation shall be paid by the proprietor prior to final acceptance of the project by the City.

2. Three (3) working days' notice is required prior to beginning any work. Contact information will be provided to the owner and contractor at the preconstruction meeting.

3. It shall be the owner's responsibility to provide soil and material testing to ensure that all construction methods and materials meet requirements of these standards. Such testing will be performed by a qualified testing laboratory or registered professional engineer acceptable to the City and/or the City Engineer. All testing shall be subject to the direction and review of the City Engineer.

4. Failure by the owner or their contractors or agents to strictly adhere to these standards, to use good engineering judgment during any phase of the work, or to conduct the work in accordance with the approved plans may cause the City or City Engineer to consider the work unacceptable.

5. Generally, one observer will be assigned to a particular project and will be responsible for that project until its completion. The contractor makes arrangements for day-to-day Construction Observation. Any interruption or moratorium on the flow of work may result in a re-assignment of that observer to another project and require the normal 3 working days' notice before work is resumed.

6. The DPS, YCUA, and City Engineer will perform a final inspection at completion of construction. No infrastructure will be accepted by YCUA or the DPS until all punch list items are complete. At the time of final inspection for all public improvements, the owner or their contractor will provide all necessary labor and equipment to allow the YCUA and DPS to inspect the system. See Project Completion/Final Acceptance guidelines later in this section.

M. Bonds

A Performance Bond must be provided to the P&D Department prior to the scheduling of a pre-construction meeting. The bond amount shall be 50% of the proposed site improvements including all utilities, paving, earthwork, and landscaping.

A two-year Maintenance and Guarantee Bond (see Appendix B), in an amount equal to 50% of the infrastructure constructed in the public right-of-way must be posted prior to final acceptance (e.g. drive apron, sidewalk, utility cut repair, etc).

YCUA requires a Maintenance and Guarantee Bond in an amount equal to 50% of the public utility infrastructure construction cost for a period of two years (e.g. public water main, public sanitary sewer) prior to final acceptance of the utilities.

N. Easements

The applicant shall provide YCUA and the City with necessary easements prior to final acceptance of infrastructure to allow maintenance of any water mains and/or sanitary sewers that are to be located on developed property and maintained by YCUA. The form of such easements shall be subject to approval of YCUA, the City Engineer and the City Attorney. Sample easements are included in Appendix C. Sufficient evidence of title shall be provided by the grantor along with the easement in the form of a policy of title

insurance, acceptable to the City Attorney, to show that the grantor of the easement is the owner of the property. All parties having a legal interest in the property shall execute and grant the easement. Water main easements shall be of a minimum 12-foot width. Sanitary sewer easements shall be of a minimum 20-foot width.

O. Project Completion/Final Acceptance

The following items must be completed before improvements are accepted by the City and a final Certificate of Occupancy is issued:

1. For public roads constructed as part of a subdivision or otherwise, the following shall apply: In no case will a partial acceptance of any street be made for maintenance.
    a. Quit Claim Deed and necessary easement documents recorded or final plat recorded.
    b. Approximately 80% of the homes constructed.
    c. Developer's engineer must issue certification letter to the P&D Department with a copy to the City Engineer that improvements have been made per the approved plan.
    d. Right-of-way restoration complete with vigorous growth within greenbelts.
    e. Public utilities within right-of-way accepted (see below).
    f. Storm sewers completely cleaned with soil erosion measures removed.
    g. Striping and signing complete.
    h. Releases provided from all other permit agencies.
    i. See items 2 – 8 below.

2. Final Inspection scheduled and completed by YCUA, the DPS, P&D, and City Engineer with all punch list items addressed.

3. Project acceptance by Building and Fire Department.

4. Two year Maintenance and Guarantee Bond for 50% of constructed value, submitted for all new infrastructure (see Appendix B). Bonds provided for City of Ypsilanti and YCUA as detailed in Section I.M.

5. All easement documents must be submitted to the DPS for review prior to recording (see Appendix C).

6. Public sanitary sewer and public storm sewer must be taped, reviewed and approved by YCUA and the DPS.

7. Record plans must be submitted to the City Engineer for review and approval. Upon approval, final record plans must be submitted in electronic form (see Appendix A).

8. Site Grading/Setback Certification submitted by the developer's engineer (see Appendix D).

9. Certificate of Outlet submitted by the developer's engineer (see Appendix D)

10. Any outstanding fees must be paid.

II. General Requirements for Engineering Reviews

A. General Procedures

1. Prior to the issuance of a building permit, the plans must first receive approval from the Building Department, Planning and Development Department, Planning Commission, City Engineer, and Washtenaw County (if applicable).

2. A minimum of two (2) complete sets of site engineering plans will be required, depending on the various agencies influenced by the proposed development. The plans will be received at the Planning and Development Department, One S. Huron Street, Ypsilanti, Michigan, 48197. All plans must be signed and sealed by an engineer registered to practice in the State of Michigan.

3. Two (2) copies of a detailed, itemized construction cost estimate for all earthwork, water main, sanitary sewer, paving and drainage improvements must be submitted to the P&D Department at the time of plan submittal. The estimate must be signed and sealed by an engineer registered to practice in the State of Michigan.

4. On all projects for which phasing of construction is intended, a separate plan sheet shall be included in the construction drawings which breaks down all improvement quantities by item; items shall include sidewalks, storm sewer, landscaping, pavement base and wearing courses, and utilities for each phase. Such phasing limits shall match those approved by the City Planning Commission.

5. The P&D Department will forward the plans to all other concerned departments (DPS, Fire Department, etc) that may have jurisdiction over a certain phase or area of the site. The review comments of these other departments will need to be addressed by the developer as a part of the review process.

6. After completing the review, the City Engineer may return one set of plans to the design engineer with revisions and/or corrections noted on the plans. Directions will be given at that time as to how many plans must be resubmitted.

7. The plans will be reviewed again and revisions must be made as required.

8. Prior to engineering plan approval, all permits and storm water agreements must be forwarded to the City Engineer.

9. Upon Engineering, DPS, and Fire Department approval, notification will be given to the Building Department that the site-engineering plan is approved. An approved plan will be returned to the Building Department, the DPS and owner.

10. Partial approvals will generally not be given. All revisions on all elements of the project must be made prior to engineering approvals.

11. Approval will not be given until all required fees have been deposited.

B. General Plan Requirements

1. Construction cost estimate shall be submitted with plans. The estimate shall be sealed by the design engineer. City Engineer will review estimate.

2. Submittal on 24" x 36" white paper having blue or black lines with a minimum horizontal scale of 1" = 50' and vertical of 1" = 5'. Other acceptable scales are 1" = 20', 1" = 30' and 1"= 40'.

3. General plan scaled at 1" = 100' or 1" = 200' when size of site prohibits a single plan sheet. Show street names, units, utilities, pavement, site dimensions, phase lines, lot lines and lot numbers.

4. Location map showing section number and major thoroughfares, drawn with appropriate scale not greater than 1" = 100' nor smaller than 1" = 2000'.

5. Lot number, parcel dimensions and adjoining rights-of-way.

6. Plans must be prepared under, and signed and sealed by, a professional engineer registered in the State of Michigan. All correspondence concerning the design of the site will be directed to the engineer whose seal appears on the plan.

7. Title sheet showing:
   a. Project title
   b. Location map
   c. Index of plan sheets
   d. Symbol legend
   e. Plan completion date with most recent revision dates
   f. Name, address and phone number of engineer and the owner, and affected permitting agencies

8. Legal description of property that closes within acceptable limits.

9. Setbacks and building separations noted in accordance with zoning requirements.

10. Striping plan for parking lot areas in accordance with zoning requirements.

11. Walls or berms must be shown in cross-section. Walls separating a grade differential of more than 18" are considered retaining walls and require a structural engineering design and review. Design Engineer must supply calculations with engineering plan submittal.

12. The storm sewer, sanitary sewer and water main shall be shown on the same plan view.

13. Title block for each sheet.

14. Include landscape plans. Plantings must not interfere with utilities.

15. Adequate space must be provided to allow for turning movements of vehicles including trucks and fire engines.

16. North arrow, scale, and MISS DIG notice on all sheets.

17. Concrete pads provided for trash dumpsters.

18. Utilities must be a minimum of 10’ from buildings.

19. Proposed locations of gas, electric, cable, phone, etc. must be shown on the plans. These must be located in rear yards on residential sites.

20. If final site plan is approved prior to engineering approval and changes are made to easements, right-of-way., etc., the final site plan and master deed will need to be revised.

III. Soil Erosion

A. Sites Requiring Permits

1. All sites shall follow Washtenaw County Soil Erosion and Sedimentation Control procedures.

B. Intent of Permit

1. The intent of this requirement is to ensure that no silt or sediment enters the public stream or watercourses. This is accomplished through means of silt fences, filters, diversions, etc.

C. Plan Requirements

1. The Office of the Washtenaw County Water Resources Commissioner is responsible for soil erosion permitting and inspection. Current information, including permit application packages, can be found on their website at http://www.ewashtenaw.org/government/drain_commissioner/dc_websoilerosion

D. Construction Observation

1. Construction Observation will be made periodically by Washtenaw County throughout construction on the maintenance and effectiveness of soil erosion control methods.

2. If Construction Observation reveals that the controls are not being implemented, a cease and desist order on all site construction may be issued.

IV. Topography

A. General

1. A complete topographical survey is required for all sites. Existing off-site elevations must be given at a minimum of 50' and 100' outside the entire perimeter of the site. Grades will be indicated at all property corners and along all property lines. On-site, intermittent elevations or defined contours are required to establish the existing site drainage.

2. All existing conditions will be indicated. Locations and elevations must be given on the following:
   a. Existing drainage courses, ditches and culverts.
   b. Sidewalks.
   c. Finished grades of all adjacent buildings.
   d. All easements.
   e. Trees.

3. Show existing utilities (invert and casting elevations), gas main, electric lines, phone lines, cable lines, and power poles.

4. Two USGS NGVD 29 benchmarks are required. All elevations shown on plan must be to USGS datum.

5. Road topography will extend across the entire site with grades shown on both sides of the street for:
   a. Property line.
   b. Ditch centerline.
   c. Top of bank.
   d. Edge of shoulder.
   e. Edge of pavement or top of curb.
   f. Crown or centerline.
   g. Existing and proposed right-of-way, per the Master Plan.

6. Property lines must be indicated by distances and bearings where applicable.

7. Existing and proposed rights-of-way of adjacent roads must be indicated.

V. Grading

A. General

1. All proposed developments shall be graded such that storm water runoff shall be intercepted within the boundaries of the site and conducted through a storm sewer system to an approved point of discharge. Open drainage ditches may be approved only where storm sewer systems are not feasible, as determined by the engineer.

2. No storm water runoff from developed property shall flow onto the adjacent lands of others. Filling and grading shall not create a barrier causing entrapment of water on the adjacent lands of others.

3. The developer shall provide for overland flow of storm water from adjacent properties where the existing off-site land slopes to the site. The amount of runoff to be provided for from off-site lands shall be at least equal to the amount of runoff from the land in the undeveloped state.

4. Each single-family lot shall be graded to drain away from the house to swales constructed along the lot lines. Swales shall discharge to a catch basin, roadway gutter, or other approved drainage course.

5. Grading plans shall take into account the desirable natural features and the character of the land, which must be preserved where possible.

6. No filling will be allowed in any areas of land within a proposed subdivision or other type of development which lie either wholly or in part within the flood plain of a river, stream, creek, or lake unless under the terms of a permit granted by the MDEQ.

7. Trees and stumps (removed due to grading operations), excess topsoil, surplus materials, construction debris, etc., shall be removed from the site and properly disposed of.

8. Elevation representing the brick ledge, finished grade, and the first floor grade must be indicated.

9. Proposed grading shall meet abutting property line elevations. Differentials in grade must incorporate a minimum four horizontal to one vertical scope to the abutting property line.

10. Any wall separating a differential grade of more than 18" shall be considered a retaining structure and will require a structural engineering design and review.

11. Asphalt surface parking lots and roadways shall be graded to a minimum 1% slope, 1' per 100', except where concrete curb and gutters are to be provided. Where concrete curb and gutters are to be used, the transverse slope to the gutter shall be a minimum of 1% for parking lots and 1/4" per foot for roadway crowns.

Longitudinal gutter grades shall be a minimum of 0.5%. In general, pavement grades shall not exceed 6%.

12. All areas within 25' of buildings shall slope away from the building at a minimum slope of 2%. All other areas shall have a minimum of 1% slope.

13. All lawn or landscaped areas shall drain to parking lots or swales.

14. Catch basins shall be placed at all low points in parking lots and swales.

VI. Paving

A. General:

1. All paving shall conform to the current standards and specifications of the Washtenaw County Road Commission, MDOT Standard Specifications for Construction (current edition), and the City of Ypsilanti, as applicable. "Permeable pavements" are allowed.

2. Any road improvements in Washtenaw County right-of-way are subject to the review and approval of Washtenaw County. A permit must be secured for construction.

3. Any road improvements in MDOT right-of-way are subject to the review and approval of MDOT. A permit must be secured for construction.

4. The Washtenaw County Road Commission standard paving detail sheets shall accompany construction plans where required.

5. Construction of new or reconstructed driveways connecting to an existing county or state roadway shall be allowed only after an approved permit has been secured from the agency having jurisdiction over said roadway.

6. Cross-sections of all proposed pavement must be shown on the plans. All cross sections must be engineered based on soil conditions and expected passenger and commercial traffic volumes. Cross sections will be reviewed and approved on a case-by-case basis.

7. The minimum surface grade for asphalt paving shall be 1%. The minimum surface grade for concrete paving shall be 0.5%. In general, pavement grades shall not exceed 6%.

8. Concrete curb and gutter shall be required around all private paving. Wheel stops may be substituted for curb for the parking stalls only. Asphalt curbs are not allowed.

9. Underground storm sewers shall be installed with all paving that requires concrete curbs and gutter.

10. Where pavements are to be constructed over clay soils or other poorly drained soils and a granular sub-base is used, an approved sub-drainage system shall be installed. Edge drains will generally be required for all roads.

11. Design standards of Washtenaw County Road Commission shall apply for horizontal and vertical alignment of all roadways.

12. Soil borings must be taken and analyzed by a professional engineering firm, qualified to do such work, at the locations of all proposed public roads. Copies of the report must be submitted to the County and the City Engineer. It is recommended that soils investigations be done and a report prepared for all areas where pavement is proposed.

13. Sufficient proposed grades must be shown on the plan to clearly demonstrate the drainage patterns.

14. Parking spaces, maneuvering lanes, and driveways shall conform in size and configuration to City ordinances.

15. The minimum requirements that follow are based on adequate sub-grade, sub-grade drainage and average live loads. Each site must be examined individually and additional pavement thickness and/or base requirements may be necessary.

B. Public Roads:

1. Public roads under Washtenaw County jurisdiction must conform to Washtenaw County Road Commission standards. Plans must be reviewed by Washtenaw County Road Commission. A permit must be obtained from Washtenaw County Road Commission for construction.

2. Public roads under the City of Ypsilanti jurisdiction must also conform to Washtenaw County Road Commission standards. Plans must be reviewed by the DPS and the City Engineer. Approval must be granted by the City Engineer and a permit must be obtained from the DPS.

C. Private Roads:

Private Roads must conform to the following minimum requirements:

1. Sub-Grade Requirements:

    a. A 6" compacted thickness of MDOT Class II granular material shall be placed under all pavements except where existing soils consist of approved granular materials.

    b. A minimum of 6" of MDOT 21AA aggregate base must be placed under concrete pavement sections.

2. All pavement surfaces must be supported upon a prepared sub-grade that has been compacted to at least 95% of maximum unit weight in accordance with MDOT standards. When unstable sub-grade materials, i.e., peat, muck, marl, wet clays, etc., are encountered, excavation and removal of such unstable materials and replacement to plan sub-grade with approved materials compacted in place shall be required. Approved materials shall include crushed stone, gravel, coarse sand, or other materials approved by the City Engineer.

3. Should it be found that the excavation, removal and replacement of unstable sub-grade material is impractical due to excessive depths, alternate pavement structure designs must be submitted to and approved by the City Engineer prior to pavement installation.

D. Parking Lot Pavements (Non-industrial):

1. Asphalt pavement cross section shall be placed on suitable granular soil sub-base. 6" compacted thickness of MDOT granular material Class II shall be placed except where existing soils consist of approved granular material. Pavement cross section shall be a minimum of 3" HMA on 8" 21AA.

2. Concrete pavement cross section shall be a minimum of 6" thick plain concrete pavement; MDOT Spec. 7.01; mixture 35P with 8" granular sub-base.

3. All parking spaces and isles shall conform to Article XIII of the Zoning Ordinance.

E. Industrial Parking Lots:

1. Parking lots for industrial uses will be reviewed on an individual basis with consideration given to intended use, type and volume of traffic, and subsoil data furnished by the developer. The applicant must submit pavement design criteria along with basis of design to be reviewed by the City Engineer. In no case shall the minimum design standards be less than those outlined here for non-industrial parking lots.

F. Sidewalks:

1. Sidewalks are required along all frontage. They shall be located in the right-of-way, 1' from the ultimate right-of-way line.

2. The walk shall be 5' wide constructed of 4" of Portland Cement concrete on compacted porous sub-grade. The walk must be continued through driveway sections where it shall be increased in thickness to 8" on major thoroughfares and collector roads and 6" in all other instances. Curbs must be tapered to meet the walk. Cross slopes on the sidewalk shall be 1/4" per foot maximum toward the street.

3. Proposed grades must be indicated along the property line, driveways, and intermittent locations along the length of the walk.

4. Any structures, hydrants, poles, etc., that are existing along the alignment of the walk, must be adjusted or relocated at the expense and coordination of the developer.

5. All sidewalk construction shall be in accordance with Americans with Disabilities Act requirements, including 28 CFR section 35.151 and 28 CFR part 36 App. A, the ADAAG. The project, to the maximum extent feasible, shall be performed in such a manner that the facility is readily accessible to and usable by individuals with disabilities.

G. Driveways:

Residential driveways shall conform to Article XIII Section 122.833 of the Zoning Ordinance.

1. Residential Driveways, (Single Family):

    a. The drive apron shall be 6” concrete over a 6" compacted 21AA aggregate base course. Approval from the Planning Commission and the City Engineer are required for bituminous drive aprons.

    b. Concrete driveways must be 6" thick from the back of curb to the property line and a nominal 4" thick beyond the property line on private property. Concrete shall conform to MDOT 7.01, Grade 35P.

    c. Bituminous driveways shall consist of a minimum compacted thickness of 3" (two equal lifts) of bituminous pavement placed over a 6" compacted 21AA aggregate base course. The bituminous mixture shall be an MDOT mix approved by the City Engineer.

    d. The driveway cannot be located closer than 2' from the property line.

    e. The driveway approach at the roadway edge cannot extend beyond the property line extended, thereby creating an encumbrance across the frontage of the adjacent properties.

2. Commercial and Industrial Drives

    a. Commercial and Industrial Drives will be reviewed on a case by case basis.

    b. Cross section and geometric requirements will be dictated by the expected vehicle size and weight.

VII. Storm Sewer and Detention Basin

A. General

1. All construction must conform to the current standards and specifications of the City of Ypsilanti, Washtenaw County, Michigan Department of Environmental Quality (MDEQ) or Michigan Department of Transportation as jurisdiction applies. The following watersheds will be under the review of MDEQ due to thermal/environmental sensitivity: Paint Creek.

2. The use of Low Impact Designs (LIDs) and Best Management Practices (BMP's) to manage storm water are encouraged. Washtenaw County Standards shall be followed when implementing low impact design techniques: http://www.ewashtenaw.org/government/drain_commissioner/dc_webPermits_DesignStandards/dc_lid

3. Where construction of storm sewer is proposed, the Washtenaw County Drain Commission or Ypsilanti City standard storm sewer detail sheets must accompany the plans, depending upon jurisdictional responsibilities.

4. Underground drainage facilities will generally be required. All run-off on-site must be accommodated and discharged in a controlled manner. The minimum on-site pipe size is 12". All public systems shall have a minimum pipe size of 12".

5. Sump pump discharge must be directed into the storm sewer via an enclosed system. A minimum of 4" pipe shall be utilized and will also be allowed to discharge unrestricted.

6. Depth of sewer: The minimum allowable coverage over pipe is 2.5'. Where possible, the minimum cover shall be 4'.

7. A certificate of outlet will be required for each discharge.

8. Capital improvement and stormwater services charges will be assessed as defined in Chapter 42 of the Code of Ordinance of the City of Ypsilanti and set forth by resolution of the Ypsilanti City Council.

B. Structure

1. Inlets at the upstream end of the system shall be a minimum of 24" in diameter. Catch basins with an inlet pipe shall have a minimum diameter of 48". All manholes and public catch basins shall be a minimum of 48" in diameter. All structures must be a minimum of 4' deep.

2. The first structure upstream from a public system within the confines of the private development shall be 48" in diameter and have a 24" sump.

3. Manholes shall be located at:

a. All changes in alignment.

b. Points where the sewer changes size.

c. Points where the grade changes.

d. Junction of sewer lines.

4. The maximum distance between manholes shall be 300' for sewers 30" diameter and smaller; 400’ for 36" diameter; and 600' for diameters greater than 36".

5. Catch basins shall be located as follows:

a. 5' away from the end of radius.

b. At all low points.

c. No more than 150' of street drainage will be allowed to flow around a corner.

d. A relief basin will be required at the highest end of radius where drainage is required to cross an intersection longitudinally.

e. At intermediate points along the street, the maximum distance drainage will be allowed to flow is 600'. The maximum street drainage into a basin is 800', (from two directions).

f. Where longitudinal grade exceeds 1000', a double inlet structure will be required at the low point.

C. Storm Sewer Design

1. Storm sewers shall be designed using the Manning Equation for pipes flowing full.

2. Runoff shall be determined using the Rational Method with an intensity formula of:

a. $I = 175 \div (T+25)$. The initial time of concentration (T) shall generally be 20 minutes maximum.

3. Storm sewer design computations must be submitted for review. The velocity shall be a minimum of 2.5 fps and shall not exceed 10 fps.

4. The minimum and general maximum gradients in percent slope for each size pipe listed shall be as follows:

Pipe Diameter	Minimum Slope	Maximum Slope
12"	0.34	4.8
15"	0.26	3.6
18"	0.2	2.6
21"	0.16	2.2
24"	0.14	1.8
27"	0.12	1.5
30"	0.1	1.3
36"	0.08	1
42"	0.06	0.8
48"	0.05	0.7

5. The 10-year design storm hydraulic gradient must be maintained within the pipe wherever possible and shall be shown on the storm sewer profile. It must be a minimum of 2' below the top of all inlet structures.

6. The 100-year storm flood plain elevation contours must be shown on the plans, and the source of the information shall be included.

7. Run-off coefficient can be determined for each individual drainage area and calculations for each drainage area must be submitted as part of the design computations.

8. Along with the storm sewer design computations, the design engineer must submit a storm district map showing all drainage districts within the development. The district limits must be overlaid on a proposed grading plan for the site.

9. All upstream drainage must be accommodated on-site. Allowances for upstream area must be based on ultimate improvements and run-off.

10. Discharge must not be diverted onto abutting properties. The outlet must be in accordance with the existing natural drainage courses in the area.

11. Footing drains shall be discharged by means of sump pumps connected by underground piping to a storm sewer.

12. For new subdivisions and site condominiums, storm sewers shall be extended where required to provide an outlet for sump pump lines for all lots. Exceptions to this rule may be permitted where soils and hydrology studies demonstrate that sump pumps discharging to the ground surface will not cause a drainage problem for the prospective homeowner or the adjacent lot owners.

13. Sump pump discharge lines shall not discharge directly to street gutters.

D. Plan and Profile:

1. All public storm sewers must be shown in profile. For developments larger than one acre the private sewer must also be shown in profile.

2. The following must be shown in profile:

   a. Length of run between manholes and catch basins.

   b. Type and class of pipe between manholes and catch basins.

   c. Size and grade of sewer between manholes.

   d. Top of casting elevations.

   e. Inverts of all pipes at manholes.

   f. Proposed and existing ground elevations along the route of the sewer.

   g. Progressive numbering system on all manholes and catch basins.

   h. All utility crossings.

   i. Special backfill areas.

   j. Hydraulic gradient for the 10-year design storm.

E. Taps

1. Connections must be made at manholes. Blind taps are not allowed.

F. Detention

1. Any site development must detain the increased run-off on-site. Acceptable means of detention can be achieved through oversize storm pipes or a separate detention basin. Either of these designs may be utilized to achieve the required detention.

2. Reduced detention requirements may be appropriate if a site has a direct discharge to the Huron River. These cases will be reviewed and discussed with the applicant during the site plan review processes. All sites are required to meet water quality standards prior to discharge, including first flush treatment.

3. Storage of water in parking lots will be reviewed on a “case by case” basis but is generally discouraged. Where allowed, that maximum allowable depth is 4".

4. Sufficient detention volume must be provided so that the allowable discharge rate during the design storm is not exceeded.

5. Discharge must be throttled to a restricted rate.

6. The basin must be constructed to drain entirely unless designed to retain a permanent water level that conforms to the aesthetics of a landscape plan relating to the surrounding landscape.

7. The bottom of the dry basin must be permanently stabilized with maintainable densely rooted turf.

8. A minimum of 12" of freeboard must be maintained with a positive, non-erodible overflow capable of handling the capacity of a 100-year storm.

9. Minimum grade on the bottom of the retention basin shall be 1%.

10. A maintenance agreement shall be required for all detention basins.

11. Design Criteria:

    a. The outfall from retention basins shall be designed to operate by gravity. Where this is not possible, mechanical pumping is permissible, and such facilities are subject to the review and approval of the City DPS.

    b. Mechanical lift stations for detention basin discharge shall be designed with a minimum of two pumps, each rated at the allowable discharge rate and provided with an automatic control system to operate the pumps on alternating periodic cycles. The pump control system shall also contain a manual override control. The developer shall furnish all design data on the pumps and discharge force main. The developer shall also include calculations and pump performance curves.

    c. The allowable discharge must be determined by one of the following: (In no case shall it be more than 0.15 cfs. per acre)

        1) Discharge approved by agency having jurisdiction over outlet, i.e. Washtenaw County Drain Commission; (approval must be submitted).

        2) S.C.S. Technical Release No. 55 "Urban Hydrology for Small Water Sheds"; (calculations must be provided).

        3) Allowable flows for which the outlet was designed, (previous calculations must be submitted).

d. The storage volume required shall be equal to, or greater than, the volume computed for a 100-year frequency storm according to the formulas provided by Washtenaw County Drain Commission.

e. Any volume of water provided below invert of the gravity outfall pipe will not be considered as usable detention capacity.

f. The formula for an orifice discharge is $Q = 0.62\ a \sqrt{2\ gh}$

G. Retention

1. Retention basins will only be considered in cases where no other positive outlet for storm water runoff is available. Retention basins with no outlet will be capable of storing two consecutive one hundred year storm events, which can be determined by:

$$V = 2 \times 16{,}500 \times A \times C$$

2. The proposed storage volume of the retention basin will be based on the total amount of contributing acreage, including all off-site areas that flow onto the property.

3. The applicant must submit soil-boring logs, taken within the basin area to a depth of twenty-five (25) feet below the existing ground or twenty (20) feet below the proposed basin bottom elevation.

4. The ground water elevation must be below the bottom of the basin.

5. A minimum of 12" of freeboard must be maintained with a positive, non-erodible overflow capable of handling a 100-year storm.

H. Public Storm Sewer

1. All public storm sewers must be located in a public right-of-way or an easement. Standard easement forms are available in Appendix C. The easement size will vary as required for maintenance and access. The minimum storm sewer easement shall be 12'. The dedication of the easement will be required prior to City acceptance of the system for continuous maintenance and service.

2. Any storm sewer that accepts runoff from abutting property or public right-of-way must be placed in a minimum 12' storm sewer easement.

I. Materials: Storm Sewer

1. Sewer Pipe:

   a. Concrete Pipe: Storm sewer pipe shall conform to the current ASTM "Tentative Specifications for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe", ASTM C-76 for circular pipe, or C-507 for horizontal

elliptical pipe, latest revision. If other materials are proposed for use, the proprietor shall furnish the load carrying design analysis for the pipe for the proposed depth conditions.

b. Plastic Pipe: Plastic pipe will be allowed only in areas outside the influence of paved surfaces. The pipe must be High Density Corrugated Polyethylene (HDPE) with a smooth interior. It must conform to AASHTO M294-Type S.

2. Pipe Joints: Pipe joints shall conform to one of the following requirements:

a. Modified Grooved Tongue (MGT), pipe shall have a rubber gasket snapped into a groove cast into the tongue. The modified groove or bell end of the pipe shall be made smooth and shall have not over a 3 degree slope for sizes 10" - 24", or a 2 degree slope for sizes 27" - 108", tapered to fit the rubber gasket to tolerances as determined by the gasket manufacturer. MGT joints shall be lubricated and coupled in accordance with the pipe manufacturer's printed instructions.

b. Rubber gasket joints shall be in accordance with the Tentative Specification for "Joints for Circular Concrete Sewer and Culvert Pipe, Using Flexible, Watertight, Rubber Type Gaskets", ASTM Designation: C-443, latest revision. Rubber gasket joints shall be lubricated and coupled in accordance with pipe manufacturer's printed instructions.

3. Manholes:

a. Manholes shall be constructed of concrete block or pre-cast reinforced concrete sections in accordance with the City of Ypsilanti standard details in accordance with jurisdictional responsibilities.

b. Pre-cast reinforced concrete manhole sections shall conform to the requirements of the ASTM "Tentative Specifications for Precast Reinforced Concrete Manhole Risers and Tops", ASTM Designation C-478, latest revision. Wall thickness shall depend on depth and shall be subject to the approval of the City engineer.

c. Brick for casting adjustment or concrete block for manhole inlet and catch basin construction shall conform to the requirements of the MDOT "Standard Specifications for Road and Bridge Construction", Section 5.14.03, latest revision. Wall thickness shall depend on depth and shall be subject to the approval of the City engineer.

d. Precast manhole joints shall be as described in Section H, Item 2 of this chapter.

e. A minimum of three or a maximum of five courses of brick shall be placed above the top of the cone section on all pre-cast or block manholes.

f. Manhole covers and frames shall be East Jordan Iron Works #1010, #1000, or approved equal, (see standard detail sheets).

4. Catch Basins:

a. Catch basins shall be constructed of brick, pre-cast manhole blocks, or pre-cast reinforced concrete manhole sections, in accordance with the Municipal standard details.

b. Catch basin and inlet frame and covers shall be EJIW No. 5080 or equivalent when located in pavement edge or gutter line.

c. Catch basin and inlet frame and covers shall be EJIW No. 1010 Type M cover or equivalent when located in paved areas other than edge gutter line.

d. Catch basin and inlet frame and covers shall be EJIW No. 1000 with Type N or Type M cover or equivalent when located in yard areas.

VIII. Water Main

A. Per YCUA Standards

IX. Sanitary Sewer

A. Per YCUA Standards

Appendix A

Engineering Plan Checklist

***Site Plan Submission Requirements Available from the Planning and Development Department**

General Requirements

[ ] 1. Submitted on 24" x 36" paper with a minimum horizontal scale of 1" = 50' and vertical of 1" = 5'. Oversize plans will not be accepted.

[ ] 2. General plan at 1" = 100' or 1" = 200' when size of site prohibits a single plan sheet. Show street names, units, utilities, pavement, site dimensions, phase lines.

[ ] 3. Plan completion date with most recent revision date.

[ ] 4. Location map showing section number and major thoroughfares.

[ ] 5. Lot number, parcel dimensions and adjoining rights-of-way (existing and proposed) clearly shown.

[ ] 6. Professional engineer seal (State of Michigan) for all site civil drawings.

[ ] 7. Name, address and phone number of engineer, architect and the owner.

[ ] 8. Title block, scale and north arrow for each sheet.

[ ] 9. Legal description of property that closes within acceptable limits. Provide legal description of R.O.W. dedication, if applicable. Confirm lot and right-of-way consistent with current Tax I.D. Maps and future Right-of-Way Map.

[ ] 10. Striping plan for parking lot.

[ ] 11. Loading spaces indicated.

[ ] 12. Building use indicated and other uses of property including any outdoor storage areas.

[ ] 13. Traffic study may be required. City Engineer to determine need during review of plans.

[ ] 14. Separate landscape plan. Verify no trees in existing or proposed public easements.

[ ] 15. Underground utilities shall not be located closer than 10' from any building or structure.

[ ] 16. For residential sites, all private utilities (i.e. gas, electric, etc.) shall be placed in backyards. A note shall be added to the site plan.

[ ] 17. Phasing limits shall be clearly identified on the plans.

[ ] 18. Truck circulation plan provided with turning movements shown for the largest vehicle.

[ ] 19. For residential or multi-unit development, a Development Agreement/Association/Master Deed document with "Exhibit B" must be submitted with maintenance outlined for all improvements, including public road acceptance.

Topographical Survey

[ ] 20. A separate current existing conditions and topography plan sheet shall be submitted, sealed by a Professional Surveyor or Engineer licensed to practice in the State of Michigan.

[ ] 21. Indicate USGS NGVD 29 benchmarks (minimum of two).

[ ] 22. Property lines shown by bearing and distance (Lines to match legal description).

[ ] 23. Existing off-site elevations at a minimum of 50' and 100' around the property. Elevations at property corners and along property lines and sufficient on-site elevations or contours to establish site drainage.

[ ] 24. Show existing conditions; ditches, culverts, utilities (invert and casting elevations), sidewalks, power poles, easements, and finish grade of adjacent buildings.

[ ] 25. Show the locations of all existing gas, electric, cable and telephone lines.

[ ] 26. Indicate the zoning of all adjacent parcels.

[ ] 27. Show existing adjacent roads with both existing right-of-way and future right-of-way per the master plan. Grades must be shown at ditch centerline, top of bank, edge of shoulder, edge of pavement (or top of curb) and pavement centerline. Grades must be shown on both sides of road.

[ ] 28. Limits of existing wetlands, regulated or unregulated, shall be shown and any impacts indicated and quantified. If none are located within the influence of the site a note shall be added on the plans.

[ ] 29. In accordance with the Huron Watershed Council, the natural drainage pattern of land shall not be altered in any way that might cause adverse effects to existing wetlands.

[ ] 30. County drains identified by name with easements shown. "Natural Drainage Courses" also identified (MDEQ jurisdiction).

Water Main

[ ] 31. Review and approval from YCUA is require for all water system improvement work, both public and private.

[ ] 32. Public water main shall be located in a greenbelt whenever feasible including new gate wells or boxes. In the event that the majority of public main is proposed under pavement, a note shall be added to the plan indicating it's the property owner's responsibility for any pavement repairs as a result of public utility maintenance.

[ ] 33. Minimum size water main is 8". Maximum dead-end main lengths are: 40' for 6" fire hydrant lead; 600' for 8" main; 1,000' for 12" main all originating from water main of equal or greater size. Loop mains if these minimums cannot be met, with a gate valve and well provided between the two connection points.

[ ] 34. All dead end mains must end with a flushing hydrant then a gate valve and well.

[ ] 35. Water main shall extend to adjacent properties as necessary to facilitate future development.

[ ] 36. Show water service and size. No private services allowed from 6" hydrant lead or water main larger than 24" in diameter.

[ ] 37. A 10' horizontal separation must be maintained between the water main and sanitary or storm sewers.

[ ] 38. Minimum 12' wide public easement must be shown on the plans. Permanent structures of any type, including but not limited to, trees, light poles, drainage structures, etc. will not be allowed within the influence of public easements. Verify against landscape plan.

[ ] 39. Valve spacing:

In the event of a breakage; three valves to isolate break, four maximum, no more than two hydrants out of service, no more than 24 single-family units or 30 multiple units out of service. Gate valve shall be placed near intersections wherever practical.

[ ] 40. Hydrant spacing: Maximum of 500' or as determined by Fire Department.

[ ] 41. No parking within a 15' radius of a hydrant.

[ ] 42. Water main pipe material shall be shown.

[ ] 43. For new developments with proposed cul-de-sacs, water main shall be extended around the entire cul-de-sac to facilitate service taps.

[ ] 44. Any public water main proposed on adjacent properties will require a public easement. A letter of understanding with sketch shall be provided from the adjacent owner prior to site plan approval.

Sanitary Sewer

[ ] 45. Review and approval from YCUA is required for all sanitary sewer work, both public and private.

[ ] 46. Verify that existing sanitary system has capacity to handle the new sanitary flow.

[ ] 47. Public sanitary sewer shall be located in a greenbelt whenever feasible including new manholes. If any public sewer is proposed under pavement, a note shall be added to the plan indicating it's the property owner's responsibility for any pavement repairs as a result of public utility maintenance.

[ ] 48. Sanitary sewer shall extend to adjacent properties as necessary to facilitate future development. Adequate depth must be provided for service area.

[ ] 49. Minimum 20' wide, public easement must be shown on the plans. Wider easement may be required based on depth of sewer. Permanent structures of any type, including but not limited to, trees, light poles, drainage structures, etc. will not be allowed within influence of public sewer easement. Verify against landscape plan.

[ ] 50. Pump stations/lift stations will not be accepted unless there is no other feasible alternative. If a pump station is proposed, special language and requirements will be needed in the Development Agreement and on plans. The owner or Association is responsible for all monthly utility bills (e.g. electric, phone).

[ ] 51. Show building lead size and location.

[ ] 52. Provide minimum of 10' of separation from other utilities.

[ ] 53. Sanitary sewer pipe material shall be shown.

[ ] 54. Any public sanitary sewer proposed on adjacent properties will require a public easement. A letter of understanding with sketch shall be provided from the adjacent owner prior to site plan approval.

Storm Sewer

[ ] 55. Underground storm sewer systems are required for new developments (12" minimum diameter). Private easements indicated as necessary.

[ ] 56. Proposed collection points, system layout, sizes and outlets must be shown on the site plan. Also show preliminary invert and rim elevations.

[ ] 57. Pump stations will not be accepted unless there is no other feasible alternative. Pump stations must be labeled as private with easements indicated and appropriate maintenance language in the Development Agreement/Association/Master Deed documents. Utility bills and maintenance costs are the responsibility of the developer and/or association.

[ ] 58. If connecting to an existing system, provide calculations showing capacity of existing system based on as-built information.

[ ] 59. All sump pump drains shall be indicated and must connect to a storm structure.

[ ] 60. Minimum 2.5' of cover over system.

[ ] 61. Storm sewer pipe material shall be shown.

[ ] 62. Upstream/offsite drainage must be accommodated.

Detention

[ ] 63. Supply preliminary calculations for site plan review per the Rules of the Washtenaw County Water Resources Commissioner latest edition. Detention volume required and provided calculations shall be shown.

[ ] 64. Acceptable means of detention are open basins, underground storage systems, bioswales, and rain gardens. Parking lot storage requires special approval.

[ ] 65. A sediment forebay or other treatment structure (e.g. CDS System, Vortechnics) is required for all new detention systems.

[ ] 66. Aerators shall be incorporated into detention basins and noted on the drawings.

[ ] 67. Location and size of detention ponds shown with side slopes indicated.

Paving and Right-of-Way Improvements

[ ] 68. On-site paving requirements:

a. Pavement cross-section must be shown. Minimums are:
   1) Residential (Driveways): 4" Concrete on 6" aggregate base or 3" HMA on 6" aggregate base
   2) Commercial and Industrial: Determined on case-by-case basis depending on intensity of use, but in no cases less than residential requirement.

b. Slopes:
   1) Asphalt: Minimum 1.0% Maximum 6.0%
   2) Concrete: Minimum 0.5% Maximum 6.0%

c. Concrete curb for entire perimeter of drive or parking areas.

[ ] 69. Public right-of-way (City):

a. Pavement cross-sections must be shown

b. All public roads must have curb and gutter unless otherwise approved.

c. Turning improvements, center-turn lane, acceleration lane and taper, deceleration lane and taper as necessary to facilitate traffic flow.

[ ] 70. Sidewalks required along the frontage of all roads except in districts zoned "RE".

a. Located 1' from ultimate right-of-way line.

b. Sidewalk ramps noted, in accordance with A.D.A. standards.

c. All structures, hydrants, poles, etc., noted and moved or adjusted as necessary.

Site Grading

[ ] 71. Sufficient proposed grades indicated to ensure that:

a. Drainage is adequately discharged offsite consistent with current drainage pattern.

b. No upstream drainage is restricted.

c. Paving slopes are adequate.

d. The site generally drains without standing water.

[ ] 72. Elevation representing the brick ledge, finished grade and the first floor grade must be indicated.

[ ] 73. Proposed grading will meet abutting property line elevations. Differentials in grade must incorporate a one on four maximum slope to the abutting property line.

[ ] 74. Temporary easement from adjacent property owner will be required for any grading necessary on off-site property. Appropriate notes shall be added to the site plan if this is applicable with a letter of understanding submitted.

[ ] 75. Location of any proposed retaining walls shall be shown on plans. Walls separating a grade differential of more than 18" are considered retaining walls and require a structural engineering design and review. Design engineer must supply calculations with engineering plan submittal.

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities℠

CITY OF YPSILANTI

PRE-CONSTRUCTION MEETING
SIGN IN SHEET

Project: _____ **Date:** _____

OHM Project No: 0094- _____ **Municipality Project No.** _____

Please print the following information and provide a business card to the OHM representative.

Name	**Company**	**Phone**	**Email or Fax**

Note: Contact OHM Construction Department at 734-466-4539, Monday through Friday 8 am – 4 pm to schedule inspection at least 3 working days prior to start of construction, or send a fax request to 734-522-6427, attn Construction Department.

Please include the Project Name and OHM Project Number on all correspondence.

OHM Advisors
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
T 734.522.6711
F 734.522.6427
OHM-Advisors.com

CONSTRUCTION CONTACT INFORMATION

Project Name: _____ **Location (include section #):** _____

Project Supervisor: _____ **OHM Project No.:** **0094-** _____

Municipality Project No.: _____

Developer/Owner

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Design Engineer

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Prime Contractor

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Mass Grading/Earthwork

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Underground

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Paving

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Landscaping

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

Other: Specify: _____

Company Name: _____

Contact Person: _____

Street Address: _____

City, State & Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Emergency Contact Number: _____

PRIOR TO THE START OF CONSTRUCTION: Mark N/A if the item is not applicable to this project.

Check below if an issue is present and identify the issue and/or reference an attachment.

_____Electricity: _____

_____Natural Gas: _____

_____Telephone: _____

_____Cable TV: _____

The following should address any other Municipality concerns, including other possible interested parties:

_____City of Ypsilanti: _____

_____Adjacent Municipality: _____

_____Road Commission: _____

_____Drain Commission: _____

_____MDOT: _____

_____Railroad: _____

_____YCUA: _____

_____Residential: _____

_____Community Development Agency: Developer to pay close attention to approved landscape plan.

PRIOR TO THE START OF CONSTRUCTION continued:
The following checked items must be submitted to the Municipality and OHM:

_____**PERMITS:** Copies of permits may be faxed to the OHM Construction Department at 734-522-6427.

_____ Soil Erosion Permit from the Washtenaw County
Permit #_____ Expiration Date: _____

_____ NPDES (National Pollution Discharge Elimination System - MDEQ)
Permit #_____ Expiration Date: _____

_____ Water Main (Michigan Department of Environmental Quality)
Permit # _____ Expiration Date: _____
YCUA Permit #_____ Expiration Date: _____

_____ Sanitary Sewer (Michigan Department of Environmental Quality)
Permit #_____ Expiration Date: _____
Sanitary Permit YCUA# _____ Expiration Date: _____

_____ Right of Way (Washtenaw County)
Permit #_____ Expiration Date: _____

_____ Right of Way (MDOT)
Permit #_____ Expiration Date: _____

_____ Wetland/Floodplain: (Michigan Department of Environmental Quality)
Permit # _____ Expiration Date: _____

_____ DPS Permit - City of Ypsilanti
Permit # _____ Expiration Date: _____

_____ A Performance Guarantee of $_____ must be posted with the City of Ypsilanti. A performance bond must be provided to the Department of Public Works. The bond amount shall be 100% of the construction cost per the approved engineer's estimate.

_____ Construction Fee in the amount of $_____must be paid to the City of Ypsilanti. Send a copy of the paid fee receipt to OHM Construction Department.

_____ Owner's and Contractor's Protective Public Liability and Property Damage Insurance and Contractor's General Liability Insurance shall include the following additional named insured:

1. Ypsilanti Community Utilities Authority and employees and agents jointly and individually.
2. YCUA Board of Commissioners, individually
3. All YCUA employees, agents and consultants, individually.

4. City of Ypsilanti
5. Ypsilanti City Council members and employees, individually.
6. Charter Township of Ypsilanti
7. Ypsilanti Township Trustees and employees, individually
8. Orchard, Hiltz & McCliment, Inc. its employees, agents
9. Washtenaw County Water Resources Commission
10. Any other entities impacted

_____ **SCHEDULE:** Please provide a schedule of work including the anticipation of duration for major elements such as: mass grading, water main installation, storm installation, lead installations, paving activities, and landscape restoration. Fax to OHM Construction Department at 734-522-6427.

_____ **PRE-CONSTRUCTION VIDEO TAPING:** If this section is checked, this project requires the work-site to be videotaped prior to the start of construction and a copy of the video to be mailed to OHM.

_____ **TYPE OF MATERIALS:** Please list the type and class of the materials to be used for this project and provide a copy of the testing orders (suppliers and materials) to the inspector on site.

_____ Sand _____

_____ Aggregate _____

_____ Bituminous _____

_____ Concrete _____

_____ Sanitary Sewer _____

_____ Water Main _____

_____ Storm Sewer _____

_____ Manholes _____

_____ Hydrants _____

_____ Brass/Fittings: _____

_____ Castings _____

_____ Signs _____

_____ Posts _____

PRIOR TO THE START OF CONSTRUCTION continued:

_____ Contractor shall provide material certifications to the inspector for any of the above applicable items and any other related items used in the site construction work.

_____ Excess material should be legally disposed of off-site. **DO NOT** transport any material to other sites (including residential) within the City of Ypsilanti.

_____ At the request of the City of Ypsilanti, inspection is required for the following: water main, sanitary sewer, storm sewer, retaining walls, public paving, private paving, restoration, landscaping, soil erosion control measures, sump discharges, and_____

_____ Soil Erosion Escrow in the amount of $_____TBD by the County) must be paid to the Washtenaw County.

_____ Three (3) working days notice is required (not including weekends/holidays) to schedule inspection. Applies to construction start and any time that work is suspended for two days or more, contact OHM's Construction Department or Gary Smolinski, Mondays through Fridays 8 am to 4 pm. (734) 522-6711

_____ Utilities must be staked and dated cut sheets given to inspector before construction may start. This includes water, sanitary, storm and road (where applicable). Fax cut sheets to OHM's Construction Department (734) 522-6427. (Attn Const. Department)

_____ Notify MISS DIG (800-482-7171) at least three (3) full working days in advance. Keep your reference number for complaints on improperly staked utilities or if no staking was done.

_____ Density testing will be performed by an independent testing company and <u>not by OHM</u>. The Owner/Developer is responsible for arranging this service as well as the cost for this service. OHM is to be cc'ed on all testing results.

_____ Any field problems or design changes shall be directed to the Developer's Engineer for re-design then submitted to OHM for approval. All changes must be submitted for approval, approved and distributed before construction will be allowed. Note the revision number and date on all plans.

_____ Any water used on site, originating from a public fire hydrant or water source, must have a backflow-preventer in place. Contact <u>Bob Fry</u> at YCUA (734-484-4600) for directions on water use and whenever water main flushing occurs. Water usage to be estimated on this project.

_____ Public and private streets must be maintained in a clean condition and free of debris at all times. In the event that a public roadway becomes dirty, the Contractor shall clean it immediately. The question of the cleanliness of roads and streets will be determined solely by the Municipal road agency or its authorized representative.

PRIOR TO THE START OF CONSTRUCTION continued:

____ It is the Contractor's responsibility to comply with all current MIOSHA/OSHA standards where applicable including confined space regulations for new construction. Attendance at the pre-construction meeting by the Contractor's representative acknowledges understanding of this obligation. The Municipality and its engineering consultant (OHM) will not oversee the Contractor's operations from the stand point of safety and are not obligated to act as the Contractor or Subcontractor's safety officer.

_____ Traffic control must be in compliance with the Michigan Manual of Uniform Traffic Control Devices in conjunction with local construction permit requirements or stipulations and any detour, staging or traffic control diagrams incorporated into approved plans.

____ Sidewalk Ramps – Sidewalk ramps are to be installed per the latest approved details (MDOT R-28 Series) per the Americans with Disabilities Act (ADA). Any ramps placed that do not meet the latest approved details per the ADA will be removed and replaced at the developer's or contractor's expense.

_____ **WATER MAIN**

_____ Water main shall be constructed per the Municipalities Standard Water Main Details. Where conflicts occur between the general plans and the standard details, the conditions in the standard details shall govern.

Refer to the YCUA Water Main Standards for current material requirements.

- Gate Valves in The City of Ypsilanti OPEN RIGHT (standard red valve operator nut).
- All water main to be installed with Polyethylene encasement (Poly-wrap).
- All Water main outside the influence of the road will have class II sand under and at least one foot over the pipe.
- All water main inside the influence of the road will have class II sand under and all the way up.
- The contractor will propose and use a compaction method that guarantees the haunches of the pipe are compacted properly.
- Thrust blocks are not permitted except behind tapping valves, and behind fire hydrants to virgin ground. All other joint restraint to be provided by mechanical joint retainer glands (i.e. Mega-Lug), and/ or locking gaskets.

No Waterous Pacer Hydrants

___ _ Pressure testing will be conducted by the contractor with OHM witnessing on behalf of the Municipality. Water main testing shall be per AWWA Standards. Notify OHM (Site Coordinator) of schedule (3 working days prior to test). Prior to any utility testing, the remaining escrow amount will be reviewed to verify that there is enough escrow to complete the project

_____ No bacterial tests will be performed until pressure tests have been passed. Bacteria samples (two consecutive days) will be obtained by the OHM Inspector, with the

Contractor present. Chlorination and Flushing will be conducted by the contractor and documented by OHM. The contractor will use one of the chlorination methods outlined in YCUA standard details.
Contractor may decide where the samples will be tested; either a County Lab (results available no sooner than one week) or a private testing facility (paid by the contractor). Hard copy results must be on file at OHM prior to any tie-in.

PRIOR TO THE START OF CONSTRUCTION continued:

_____ No water main tie-ins are allowed until bacteria and pressure tests have been passed. When a tie-in does occur, all flushing of the main will have been stopped, all apparatus disconnected, and all valves opened. No water main tie-ins are allowed until bacteria and pressure tests have been passed. Notify OHM 72 hours in advance of any water main shutdowns. The contractor is responsible for notifying any affected residents 24 hours before any water main shutdown. When a tie-in does occur, all flushing of the main will have been stopped, all apparatus disconnected, and all valves opened. No water main tie-ins will be allowed on Friday.

_____SANITARY SEWER

_____ Sanitary sewer shall be constructed per YCUA Standard Sanitary Sewer Details. Where conflicts occur between the general plans and the standard details, the conditions in the standard details shall govern.

_____ Sanitary taps into existing structures will be inspected by OHM. Taps into existing structures shall be neatly core-drilled and a rubber boot shall be used for the new pipe.

_____ Sanitary sewer invert elevations will be recorded by the inspector and the contractor at each structure. Sanitary sewer main that is found to be laid at less than minimum-specified grade, or with backflow, will
not be accepted by YCUA.

_____ If there are any fitting in the force main, Hydrostatic pressure testing will be conducted by the contractor and witnessed by OHM on behalf of YCUA (150 psi for one hour with less than 5psi loss). Contact OHM to set up test date. Prior to any utility testing, the remaining escrow amount will be reviewed to verify that there is enough escrow to complete the project.

_____ Videotaping of the sanitary sewer is to be performed no sooner than 30 days after completion of backfill and a copy of the tape must be on file with OHM prior to acceptance.

_____ A nine-point deflection test using a mandrel is required 30 days after the pipe is backfilled by YCUA standards. This may be difficult as there is not a dead end manhole. The camera will have to push or tow the mandrel up the run and then pull it back watching the mandrel.

_____ Coordinate construction and inspection of all sanitary service leads within 10 feet of the building with the Ypsilanti Township Building Department at 734-485-3943.

_____**STORM SEWER / UNDERGROUND DETENTION**

To be constructed per the approved plans.

PRIOR TO FINAL ACCEPTANCE OF PROJECT

____ OHM will conduct a Preliminary Walkthrough of the site after all public utility installation is complete, and after at least the leveling course of asphalt pavement is complete. A Preliminary Utility Punch list will be generated from this walkthrough. Once the items on the Preliminary Utility Punch list have been completed, OHM will issue a letter to YCUA recommending the public utilities on the project are substantially complete. ALL MAINTENANCE AND OPERATION OF THE PUBLIC UTILTIY IMPROVEMENTS ON THE PROJECT WILL REMAIN THE RESPONSIBILITY OF THE DEVELOPER / CONTRACTOR DURING THE TIME PERIOD FROM SUBSTANTIAL COMPLETION TO FINAL ACCEPTANCE. OHM, Inc. will only recommend Final Acceptance of the project upon satisfactory completion of all Close-out items, including but not necessarily limited to, Record Drawings, Easements, Maintenance and Guarantee Bond, and Final Utility Inspection.

_____ OHM may conduct one or more Interim Walkthroughs on long-term projects to identify items that are damaged as construction occurs.

____ OHM will conduct a Final Walkthrough of the site after all construction on the project is complete. This includes all buildings, landscaping, and wearing course of asphalt pavement. A Final Utility Punch list will be generated from this walkthrough and shall be transmitted to the Developer and their Contractor. The Contractor shall have thirty (30) days to rectify all items on the punch list. Failure to do so may result in the temporary or permanent Certificate of Occupancy to be withheld. All items on the Final Utility Punch list must be completed prior to Final Acceptance of the project.

____ **RECORD DRAWINGS AND RELATED DOCUMENTS**

____ After public utility installation is complete, the Developer's Engineer will be provided (by OHM) a copy of the Inspector's Daily Reports (IDR), any applicable lead reports, and a blank "Record Drawing Requirement Checklist" in order to prepare record drawings to OHM for review and approval.

____ A grading certificate will be requested at this time. This form (provided by OHM with IDR's) will also need to be signed and sealed by the Developer's Engineer and then submitted to OHM along with the record drawings.

____ Easements for public utilities based on "As-Built" conditions requires a sketch and legal description to be submitted by the Developer's Engineer to OHM for review and approval along with the record drawings. Once easements documents are approved, OHM will mail the Developer/Municipality the easements to be recorded with the County Register of Deeds. Once the easements are recorded with liber and page number, recorded copies will need to be forwarded to the Municipality and OHM.

___ Once the record drawings are approved by OHM, the Developer's Engineer will be instructed As to what is required for final distribution (i.e. Blulines, mylars, CD-ROM, or possibly micro-film)..

___ A Maintenance and Guarantee bond for 50 % of applicable Public Works based on the engineer's estimate of $_____ for a duration of **2 years** shall be submitted to the Municipality once all Final Utility Punchlist items have been addressed. A blank form will be forwarded to the developer once final inspection has passed. Please be aware that the duration of the maintenance bond is determined on the date of final acceptance.

Sidewalk ramps per ADA specifications. Please refer to MDOT R-28 Series Detials if you have any doubt.

ITEMS REQUIRED FOR RECOMMENDATION OF PROJECT CLOSEOUT

☐ **As-builts**: reviewed and approved CADD Files

☐ **Grading certificate**: signed and sealed

☐ **Easements Required:**

☐ Water Main ☐ Sanitary Sewer ☐ Storm Sewer

☐ Safety Path ☐ Ingress/Egress

☐ Other _____

☐ **Maintenance and Guarantee Bond**
A maintenance and guarantee bond for 50% of applicable Public Works based on the Engineers Estimate of $_____for a duration of 2 years shall be submitted to the municipality once all punch list items have been addressed. The amount required for this project is $_____ . A blank form will be forwarded to the Developer once final inspection has passed. Please be aware that the duration of the maintenance bond is determined on the date of final acceptance.

☐ **Passing Final Inspection**

ADDITIONAL NOTES:

All landscaping to be installed per approved landscape plans.

Appendix B

MAINTENANCE AND GUARANTEE BOND-SITE DEVELOPMENT

(This should be drafted on legal size paper)

Obligee Review or Project No._____ Bond No._____
(if applicable)

KNOW ALL MEN BY THESE PRESENTS:

That we, the developer, _____ (hereinafter called Principal), and _____ (hereinafter called Surety), a corporation organized under the laws of the State of _____ and authorized to do a surety business in the State of Michigan, are held and firmly bound unto the municipal/public agency known as _____ _____ (hereinafter called Obligee) in the full and just sum of _____ Dollars and _____ Cents ($_____), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has constructed or caused to have constructed the following described public improvements in a public easement and/or right-of-way:

(Check all applicable items)

_____lft. Storm Sewer System	_____lft. Roadway
____ lft. Sanitary Sewer System	_____lft. Sidewalk or Pathway
_____lft. Water Main System	_____Other: _____

which have been or are about to be accepted by the Obligee for the project known as _____ _____ and located in Section _____, T_____, and R_____; more specifically at _____.

AND WHEREAS, it is required that the Principal should guarantee the project from defects caused by faulty materials or workmanship for a period of ____ year(s) from and after the date of acceptance of same by the Obligee.

The Obligee shall notify the Principal in writing of any defect for which the Principal is responsible and shall specify in said notice a reasonable period of time within which the Principal shall have to correct said defect. If the Principal fails to correct such defect within the time specified in said notice, then the Surety shall have sixty (60) days thereafter within which to take such action as it deems necessary to insure performance of the Principal's obligation. If such defect is not corrected after the expiration of such sixty-day period, then the Obligee shall have the right to correct such defect and the Principal and Surety, jointly and severally, shall pay all costs and expenses incurred by Obligee in correcting such defect; including but not limited to, the engineering, legal, administration and other costs, together with any damages either direct or consequential, which the Obligee may sustain on account of the Principal's failure to correct such defect. In addition, the Obligee shall have the right to contract for the correction of such defect and, upon acceptance of the lowest responsible bid, the Principal and Surety shall become immediately liable for the amount of the said bid.

If any repair is necessary to be made at once to protect life and property, then and in that case, the Obligee may take immediate steps to repair or barricade such defects without notice to the Principal or Surety. In such accounting, the Obligee shall not be held to obtain the lowest figures for the doing of the work, or any part thereof, but all sums actually paid therefore shall be charged to the Principal or Surety. In this instance, the judgment of the Obligee is final and conclusive.

The Principal shall fully indemnify, defend and save harmless the Obligee, and its agents, consultants, employees and officers from all suits and actions for damages of every name and description brought or claimed against them for, or on account of, any injury or damage to person or property received or sustained by any party or parties, by or from any of the acts or omissions or through the negligence of said Principal, and its servants, agents

or employees, in the prosecution of the work, and from any and all claims arising under the Workman's Compensation Act, so-called, of the State of Michigan.

NOW, THEREFORE, if the said Principal shall for a period of ____ year(s) from and after the date of acceptance of the completed project by the Obligee replace any and all defects arising in said work whether resulting from defective materials or defective workmanship, then the above obligation shall be null and void; otherwise to remain in full force and effect for ____ year(s) from the date of acceptance by the Obligee.

IN WITNESS WHEREOF, the parties have caused this instrument to be signed and sealed by their respective authorized officers this_____day of_____,
20___.

WITNESS

_____

Name:_____

PRINCIPAL

_____
(seal)

By:_____

Name:_____

Title:_____

Address:_____

_____

Phone:_____

Fax:_____

SURETY

_____
(seal)

By:_____

Name:_____

Title:_____

Address:_____

_____

Phone:_____

Fax:_____

_____

Name:_____

Appendix C

PUBLIC UTILITY EASEMENT

_____, (marital status must be filled in) "grantor," whose address is_____, Ypsilanti, Michigan, in consideration of the sum of One ($1.00) Dollar, receipt of which is hereby acknowledged and determined to be fair and just compensation by grantor, does, by these presents, covenant and warrant that grantor is the fee simple owner of the property described in **Exhibit A**, attached hereto, and does grant and convey to the Ypsilanti Community Utilities Authority, a Michigan municipal corporation, referred to in this agreement as "grantee," whose address is 2777 State Road, Ypsilanti, Michigan 48198, a permanent and perpetual easement and right-of-way upon, over, under and across that portion of said property described in **Exhibit B**, attached hereto, for the purpose of construction, installation, inspection, maintenance, repair, operation, alteration, removal (and similar and related activity) of municipally owned utilities, including, without limitation, water lines and/or pipes, storm sewer lines and/or pipes and sanitary sewer lines and/or pipes and any and all connections thereto.

The grantor agrees not to build or to convey to others permission to build any permanent structures on the described easement **(Exhibit B)**.

The grantee, by its employees, agents or independent contractors shall have full right, upon, over, under and across said property for the purpose of constructing, installing, inspecting, maintaining, repairing, operating, altering or removing (and similar and related activity) said municipally owned utilities and, further, for the purpose of storing or moving machinery, materials or other incidentals in connection with and during such activity. Further, grantee, by its employees, agents, or independent contractors shall have a permanent easement consisting of the full right of ingress and egress over and upon other lands of the grantor necessary to and for the sole purpose of gaining access to said property and municipally owned utilities.

Upon completion of such construction, installation, inspection, maintenance, repair, operation, alteration or removal (or similar and related activities) of said municipally owned utilities including ingress and egress thereto, any and all of grantor's property used for said purposes shall be left as nearly and as reasonably possible in the same condition as before such work began and all machinery, materials and equipment shall be removed.

The granting of the permanent easement as stated, including a permanent easement for use of grantor's property for ingress and egress shall vest in the grantee the authority to use said property solely for the purposes designated in this agreement. This grant of easements shall run with the land and shall be binding upon the heirs, successors and assigns of the grantor and grantee. It is understood and agreed that any and all improvements or appurtenances of the municipally owned utilities in or upon the said property shall become and remain at all times the property of the grantee, its successors and assigns and shall be subject to the grantee's fees, rules, regulations and local ordinances.

IN WITNESS WHEREOF, grantor has executed this instrument on _____, 20__ .

IN THE PRESENCE OF:
(Witnesses and grantor must print or type name below signature in black ink.)

WITNESSES: **GRANTOR**

_____ _____

_____ _____

Subscribed and sworn to before me this _____ day of _____, 20____.

_____
Notary Public
_____ County, Michigan
My Commission Expires: _____

This instrument drafted by and when recorded, return to:
Thomas E. Daniels (P29565)
Pear Sperling Eggan & Muskovitz, P.C.
1349 S. Huron Street, Suite 1
Ypsilanti, MI 48197

Tax Identification No.: _____

EXHIBIT A

Insert a stamped and sealed survey of the subject property.

EXHIBIT B

Insert a stamped and sealed sketch of the easement

Appendix D

Print Form

GRADING CERTIFICATION

Submit a sealed grading certificate attesting that finish elevations are in compliance with approved grading plan along with the as-built grading plan(s) showing any changes that were made in the field.

These documents were prepared by:

Seal

Print Name

Signed

ENGINEER'S CERTIFICATE OF OUTLET

Date _____

Development Name / Address_____

City of Ypsilanti Sec. _____

Washtenaw County, Michigan

I hereby certify that the existing drain and/or stormwater collection system is the only reasonable available storm water outlet for the proposed storm water management system and that the existing drain and/or stormwater collection system has sufficient capacity to serve as an adequate outlet for the proposed system, without detriment to or diminution of the drainage service that the existing outlet presently provides.

Signed: _____

Registered Professional Engineer

NOTE: The engineer's certificate must be stamped with the engineer's seal.
The certificate submitted must be the original.

City of Ypsilanti
Planning and Development Department

Memo

To: Planning Commission
From: Leah DuMouchel
Date: March 10, 2015

Subject: Angled Lot Lines

This memo is in response to our discussion at the February planning commission meeting about how to address sites with a front lot line that is not perpendicular to its side lot lines. The question was whether buildings would be required to follow the angle of the front lot line, with related questions about how that would impact frontage buildout as well as front and side setbacks.

It is the Planning Department's opinion that the answer can be found in the definition of a "building line" (emphasis added):

> *Building line* means a line **parallel to the front lot line** that separates all parts of a building from the open spaces adjacent thereto on the same lot. (Refer to Figure 4.) For the purposes of this chapter, a minimum building line is the same as a required front yard setback line.

Thus, we are indeed requiring that buildings follow the angle of the front lot line.

At the February meeting, we then wondered how this would impact the required side setbacks. Since the side lot lines do not meet the front lot line at a 90° angle, this would mean either constructing a non-square building or reducing the building footprint to retain its angles while fitting into the buildable envelope. The short answer is: that is correct.

To illustrate and work toward understanding how this works in actual cases, the setbacks were drawn and tested on some irregular lots with various zoning designations throughout the City. The following definitions apply:

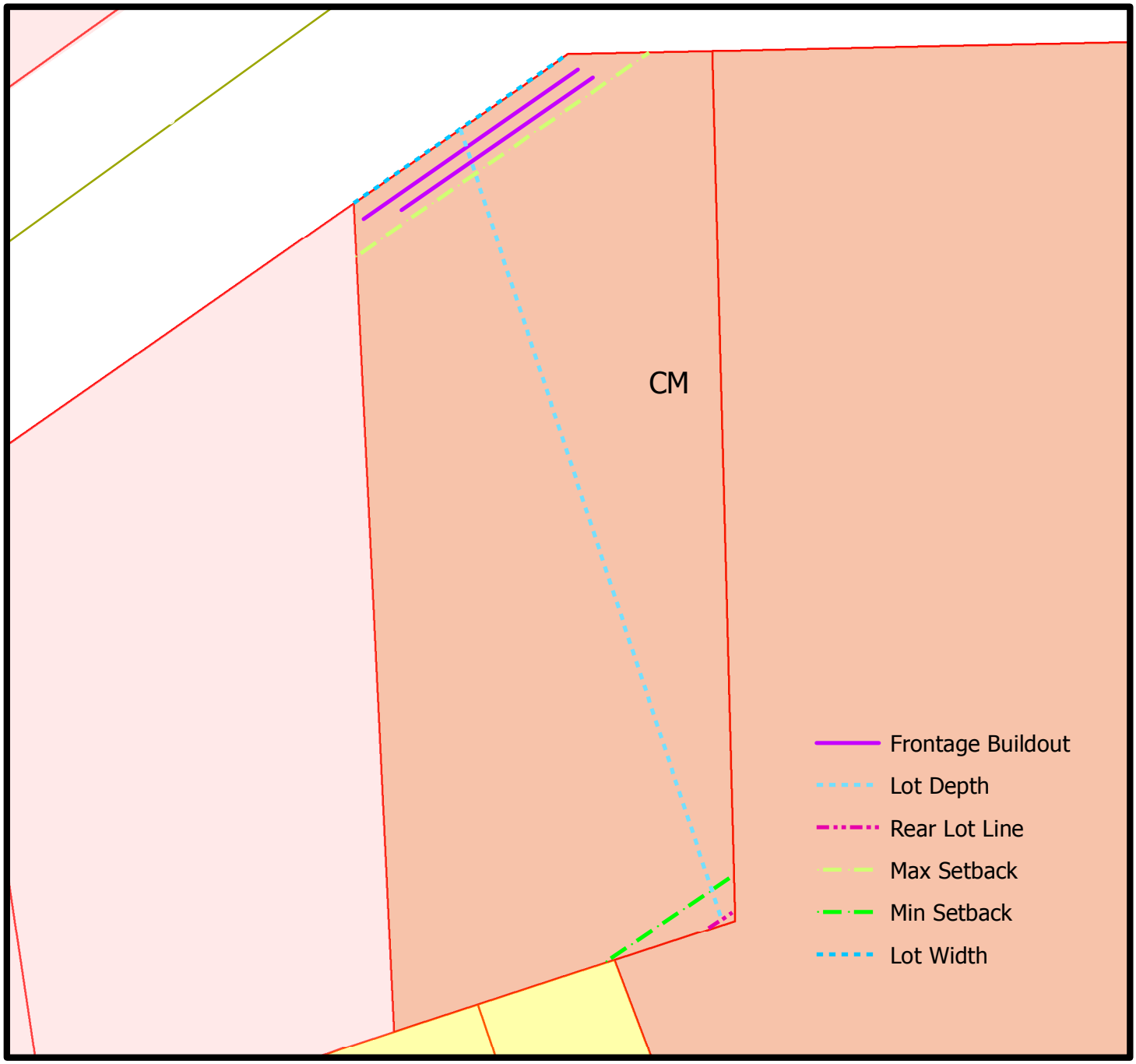
(1) *Front lot line* means, in the case of an interior lot abutting on one public or private street, the line separating the lot from such street right-of-way. In the case of a corner or double frontage lot, the front lot line shall be that line separating such lot from the street which is designated as the front street in the plat and/or in the request for a building permit.
(2) *Rear lot line* means the lot line which is opposite and most distant from the front lot line. In the case of irregular, triangular, wedge shaped, or lots that are pointed in the rear, the rear lot line shall be an imaginary line parallel to the front lot line, not less than ten feet in length, lying farthest from the front lot line and wholly within the lot.
(3) *Side lot line* means any lot line other than the front or rear lot lines. A side lot line separating a lot from a street is a street side lot line. A side lot line separating a lot from another lot or lots is an interior side lot line.

Lot width means the straight line distance between the side lot lines, measured at the two points where the minimum front yard setback line intersects the side lot lines.

Lot depth means the horizontal distance between the front and rear lot lines, measured along the midpoint between the side lot lines.

The attached pages show the lot lines, setbacks, and frontage buildouts for irregularly shaped lots in the C, NC, GC, PMD, and R1 districts.

C Zoning

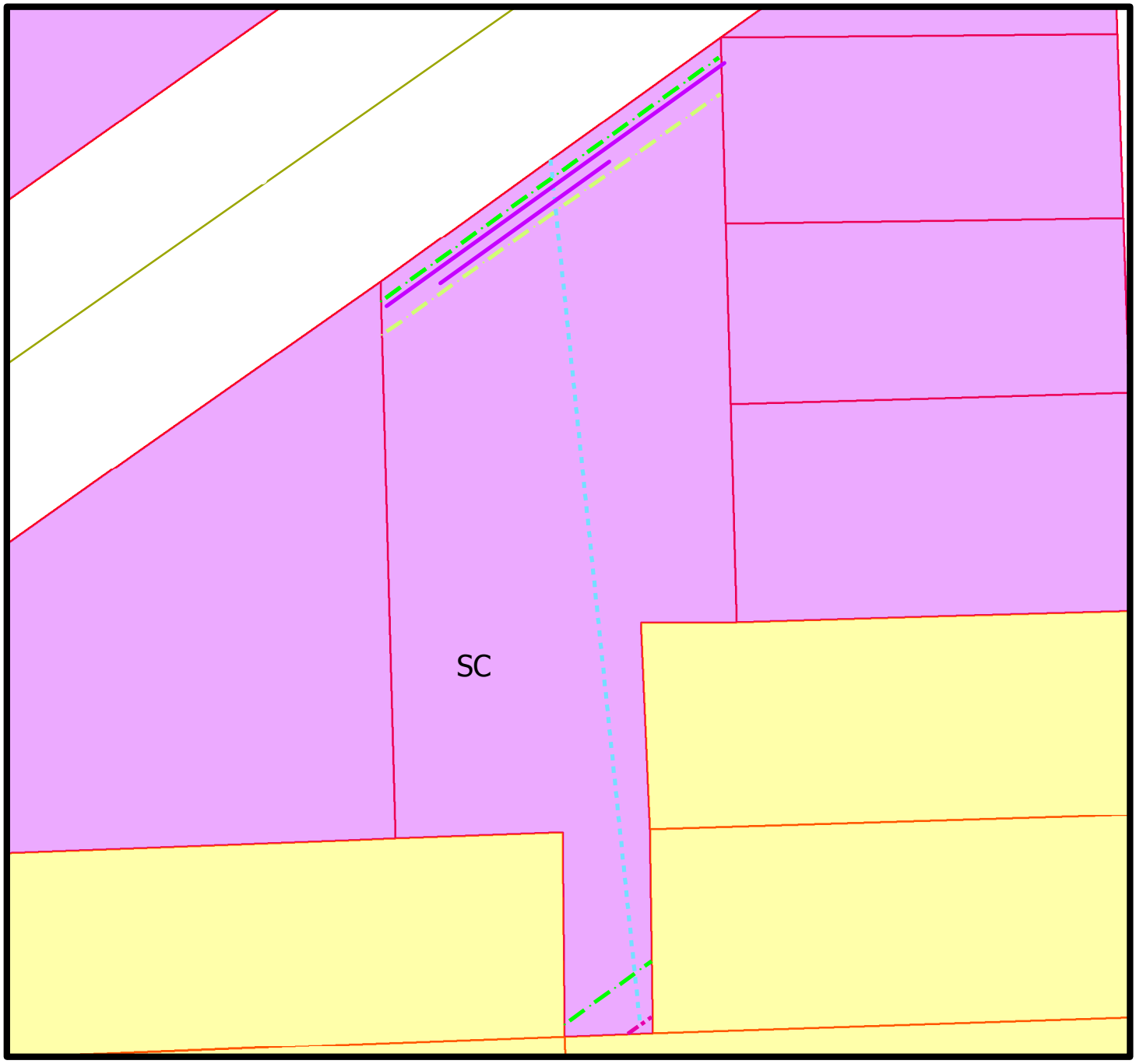


N

0 37.5 75 150 Feet

Data from Washtenaw County GIS and Ypsilanti Planning and Development
08 Dec 2014

GC Zoning



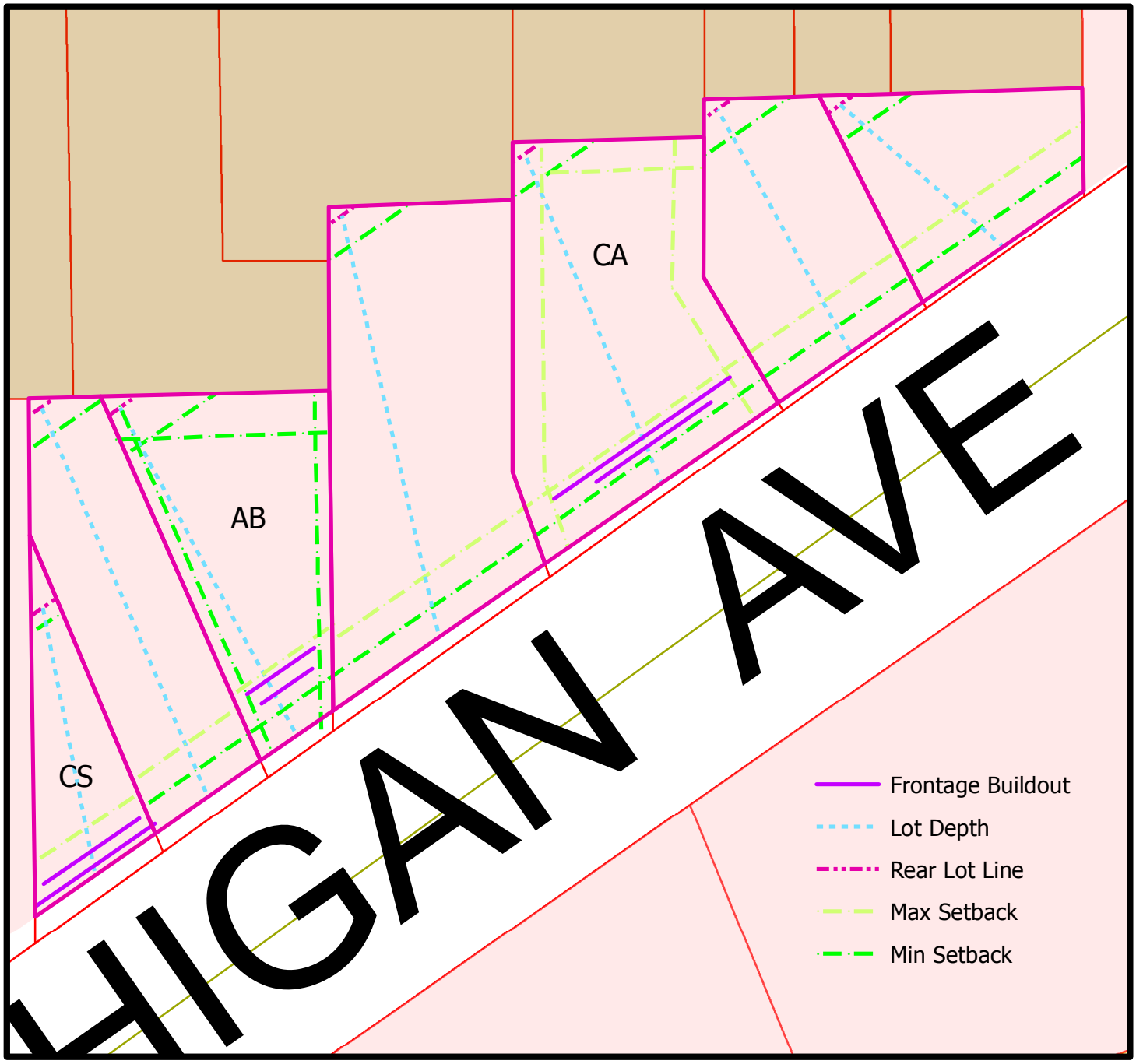
Frontage Buildout
Lot Depth
Rear Lot Line
Max Setback
Min Setback

N

0 35 70 140 Feet

Data from Washtenaw County GIS and Ypsilanti Planning and Development
08 Dec 2014

NC Zoning

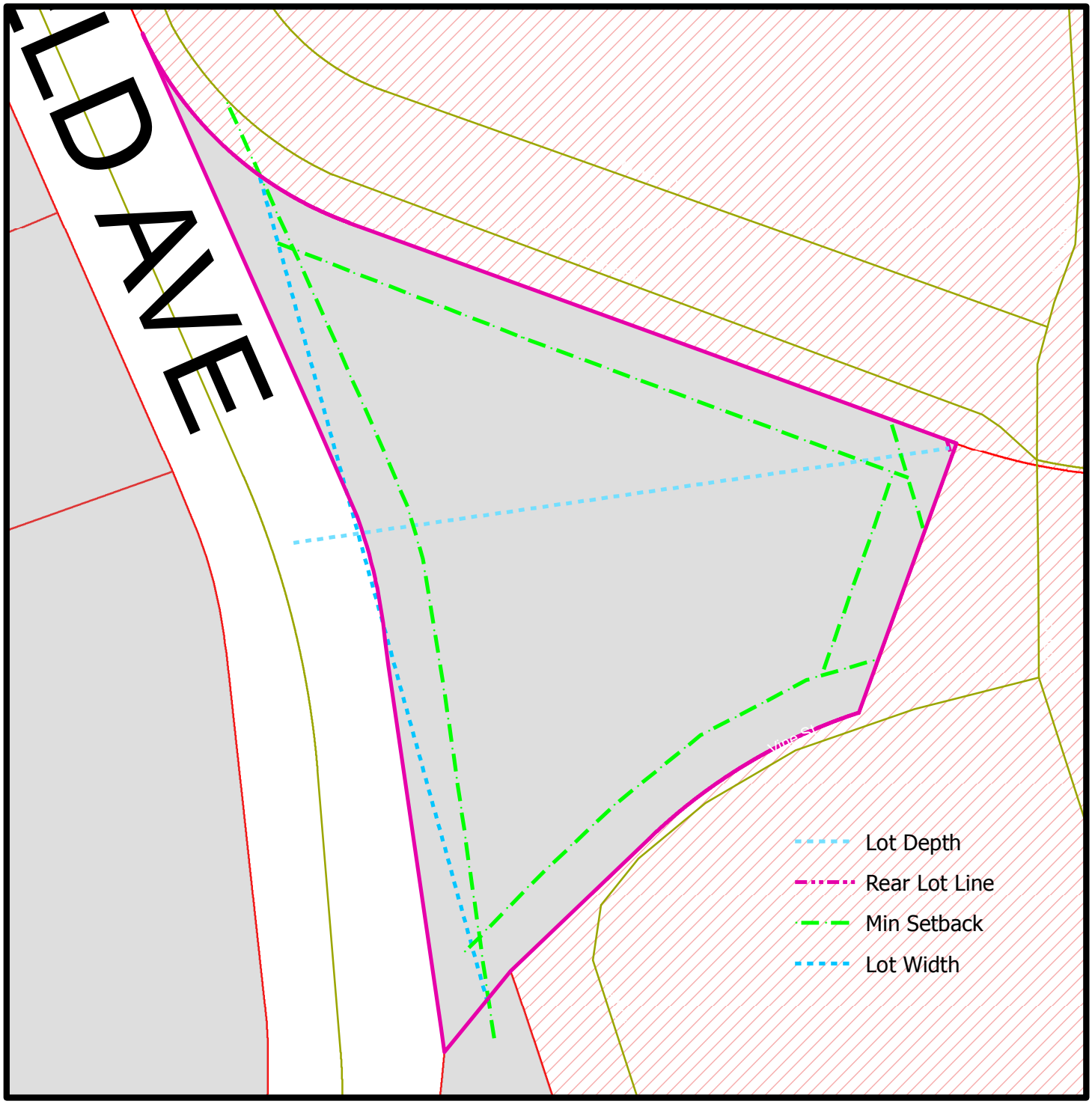


N

0 37.5 75 150 Feet

Data from Washtenaw County GIS and Ypsilanti Planning and Development
08 Dec 2014

PMD Zoning

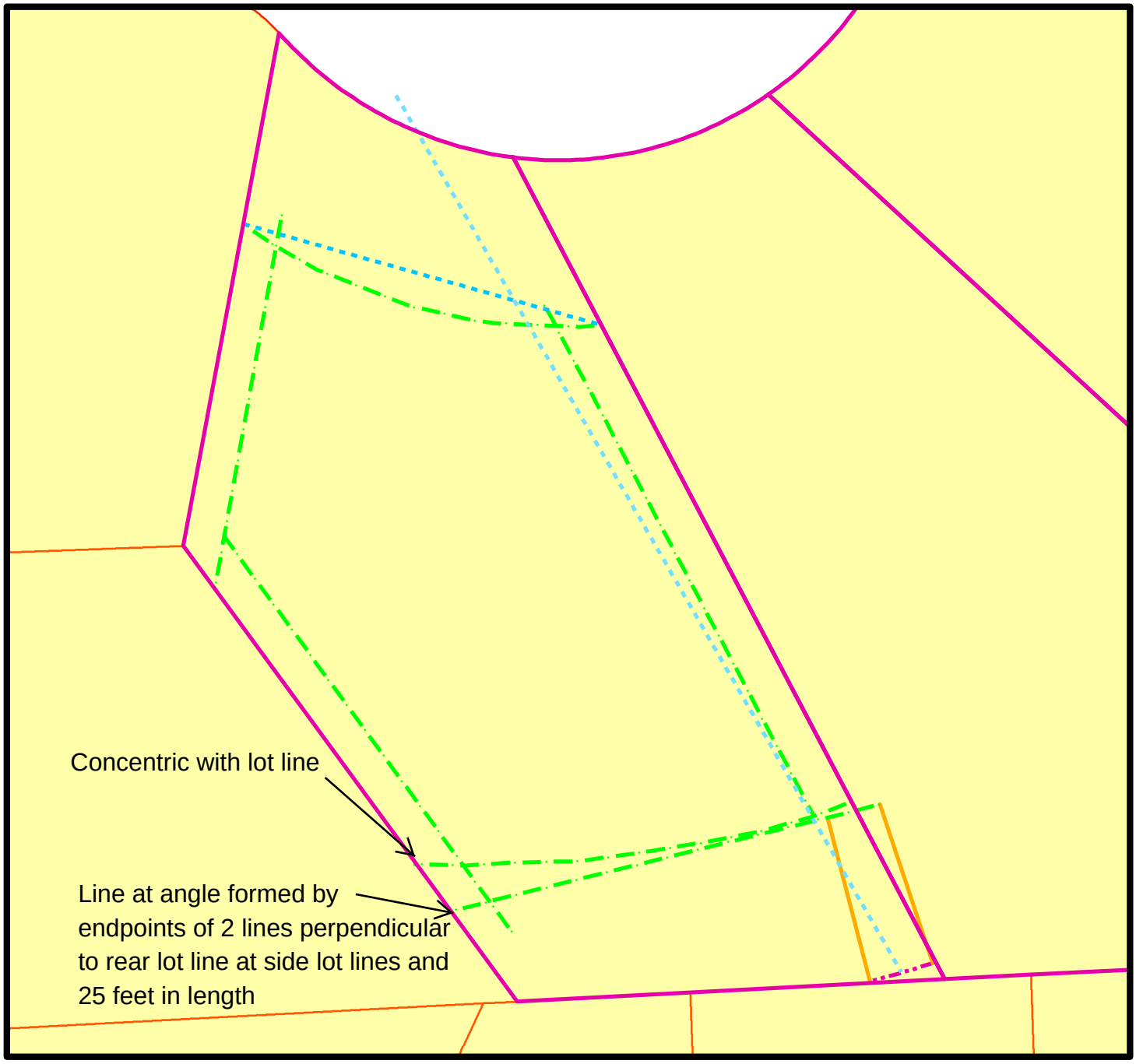


N

0 55 110 220 Feet

Data from Washtenaw County GIS and Ypsilanti Planning and Development
08 Dec 2014

R1 Zoning



Perpendicular to rear lot line at side lot line
Lot Depth
Rear Lot Line
Min Setback
Lot Width

N

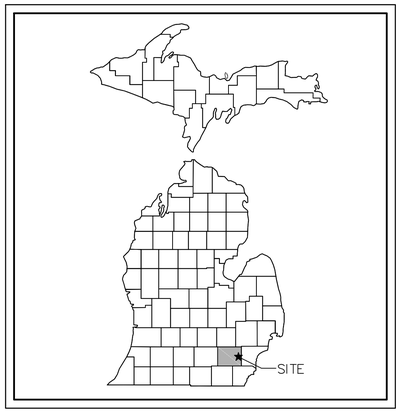
0 15 30 60 Feet

Data from Washtenaw County GIS and Ypsilanti Planning and Development
08 Dec 2014

SITE PLAN

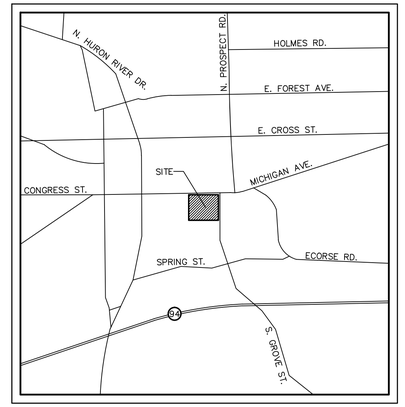
WATER STREET FLATS

CITY OF YPSILANTI, WASHTENAW COUNTY, MICHIGAN



LOCATION MAP
NOT TO SCALE

OVERALL AREA MAP
SCALE: 1" = 150'



VICINITY MAP
NOT TO SCALE

PROJECT CONTACTS

OWNER
CITY OF YPSILANTI
ONE SOUTH HURON STREET
YPSILANTI, MI 48197
PHONE: 734.483.9646

DEVELOPER/APPLICANT
HERMAN & KITTLE PROPERTIES, INC.
CONTACT: MR. MIKE RODRIGUEZ
500 EAST 96TH STREET, SUITE 300
INDIANAPOLIS, IN 46240
PHONE: 317.663.6860
FAX: 317.663.6861
EMAIL: MRODRIGUEZ@HERMANKITTLE.COM

ENGINEER/PLANNER
METRO CONSULTING ASSOCIATES, LLC
CONTACT: ANDREW WALTERS, P.E.
45345 FIVE MILE ROAD
PLYMOUTH, MI 4817
PHONE: 734.483.1427
FAX: 734.483.3431

LAND SURVEYOR
ROOSIEN & ASSOCIATES
5055 PLAINFIELD AVENUE
GRAND RAPIDS, MI 49525
PHONE: 616.361.7220
FAX: 616.361.1822

SITE PLAN PERMITTING
CITY OF YPSILANTI
CONTACT: BONNIE WESSLER
PLANNING & DEVELOPMENT DEPARTMENT
ONE SOUTH HURON STREET
YPSILANTI, MI 48197
PHONE: 734.483.9646
FAX: 734.483.7260
EMAIL: WESSLERB@CITYOFYPSILANTI.COM

OHM
MUNICIPAL ENGINERRING CONSULTANT
34000 PLYMOUTH ROAD
LIVONIA, MI 48150
PHONE: 888.522.6711

MIDWESTERN CONSULTING
WATER STREET FLATS INFRASTRUCTURE CONSULTANT
3815 PLAZA DRIVE
ANN ARBOR, MI 48108
PHONE: 734.995.0200
FAX: 734.995.0599

RIGHT-OF-WAY PERMITTING
MDOT
CONTACT: WENDY RAMIREZ
BRIGHTON TSC
10321 EAST GRAND RIVER, SUITE 500
BRIGHTON, MI 48116
PHONE: 810.227.4681
FAX: 810.227.7929

SHEET INDEX

01 COVER SHEET
02 EXISTING CONDITIONS PLAN (BY OTHERS)
03 LAYOUT PLAN
04 GRADING, UTILITY & STORM WATER MANAGEMENT PLAN
05 LANDSCAPE PLAN
06 DETAIL SHEET
07 DETAIL SHEET (BY OTHERS)
LIGHTING PLAN (BY OTHERS)
BUILDING ELEVATIONS (BY OTHERS)
BUILDING ELEVATIONS (BY OTHERS)
GARAGE PLANS (BY OTHERS)

PROJECT NARRATIVE

HERMAN & KITTLE PROPERTIES, INC. IS REQUESTING SITE PLAN APPROVAL TO DEVELOP AN 80-UNIT APARTMENT BUILDING. THE SITE IS PART OF THE WATER STREET REDEVELOPMENT AREA AND IS LOCATED AT THE SOUTHEAST CORNER OF RIVER STREET (UNIMPROVED) AND SOUTH STREET (UNIMPROVED). THE SITE IS CURRENTLY VACANT.

THE PROPOSED SITE IS 1.7 ACRES IN SIZE AND IS CURRENTLY ZONED C: CENTER. THE PROPOSED PROJECT INCLUDES A REZONING OF THE SITE TO PUD: PLANNED UNIT DEVELOPMENT.

THE PROPOSED PROJECT WILL INCLUDE A FOUR-STORY APARTMENT BUILDING. THE PROPOSED BUILDING WILL BE APPROXIMATELY 104,000 SF AND WILL CONTAIN 80 RESIDENTIAL UNITS. A PARKING LOT WILL BE CONSTRUCTED ON SITE WITH ACCESS ONTO SOUTH STREET AND LINCOLN STREET. ASSOCIATED LANDSCAPING AND UTILITY IMPROVEMENTS WILL ALSO BE INSTALLED AS PART OF THIS PROJECT. THIS PROJECT WILL BE CONSTRUCTED IN ONE PHASE.

THE SITE WILL BE SERVED BY PUBLIC AND FRANCHISE UTILITIES WHICH WILL BE EXTENDED SOUTH FROM MICHIGAN AVENUE AND WEST FROM PARK STREET. WATER SERVICE WILL BE PROVIDED VIA AN 8" WATER MAIN WHICH WILL BE EXTENDED FROM MICHIGAN AVE. SOUTH ALONG RIVER ST. TO A HYDRANT AT THE CORNER OF RIVER ST. AND WATER ST. AN 8" WATER MAIN WILL ALSO CONNECT FROM THE PROPOSED 8" WATER MAIN IN RIVER ST. TO THR EXISTING WATER MAIN IN PARK ST. SANITARY SEWER WILL BE EXTENDED SOUTH DOWN THE CENTER OF RIVER ST. FROM AN EXISTING MANHOLE IN MICHIGAN AVE. AND THEN WEST ALONG THE FUTURE RIGHT-OF-WAY OF WATER ST. TO AN EXISTING SANITARY SEWER. A PROPOSED SEWER WILL ALSO BE EXTENDED ALONG SOUTH ST. TO THE NORTHEAST CORNER OF THIS DEVELOPMENT. STORM WATER WILL BE COLLECTED IN AN ENCLOSED STORM SEWER SYSTEM AND THEN CONVEYED TO A DETENTION BASIN SOUTH OF THE SITE. THE DETENTION BASIN HAS BEEN SIZED TO DETAIN THE BANK FULL FLOOD STORM FOR THE PROPOSED DEVELOPMENT. THE POND WILL DISCHARGE TO THE HURON RIVER.

IN ADDITION TO THE PROPOSED SITE IMPROVEMENTS, SIGNIFICANT OFF-SITE IMPROVEMENTS ARE ALSO BEING PROPOSED AS PART OF THIS PROJECT. THE RIVER STREET CONNECTION ON THE SOUTH SIDE OF MICHIGAN AVENUE WILL BE RECONSTRUCTED, AND RIVER STREET WILL BE EXTENDED TO THE SOUTH APPROXIMATELY 950 FEET TO WATER STREET. ON THE NORTH AND SOUTH SIDES OF THE SUBJECT SITE, SOUTH STREET AND WATER STREET WILL BE CONSTRUCTED BETWEEN RIVER STREET AND LINCOLN STREET, AND, ON THE EAST SIDE OF THE SITE, LINCOLN STREET WILL BE CONSTRUCTED BETWEEN SOUTH STREET AND WATER STREET. OFF-SITE IMPROVEMENTS INCLUDE INSTALLATION OF STREET LIGHTS AND FIVE-FOOT SIDEWALKS ALONG ONE SIDE OF THE PROPOSED STREETS. ON-STREET PARALLEL PARKING SPACES WILL ALSO BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY OF EACH OF THE FOUR STREETS IMMEDIATELY ADJACENT TO THE SUBJECT SITE. PUBLIC UTILITIES WILL BE INSTALLED WITHIN THE PROPOSED ROAD RIGHTS-OF-WAY CONSISTENT WITH THE PLAN PREPARED BY MIDWESTERN CONSULTING DATED DECEMBER 4, 2013.

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

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

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

REV:	DATE:	ISSUED FOR:

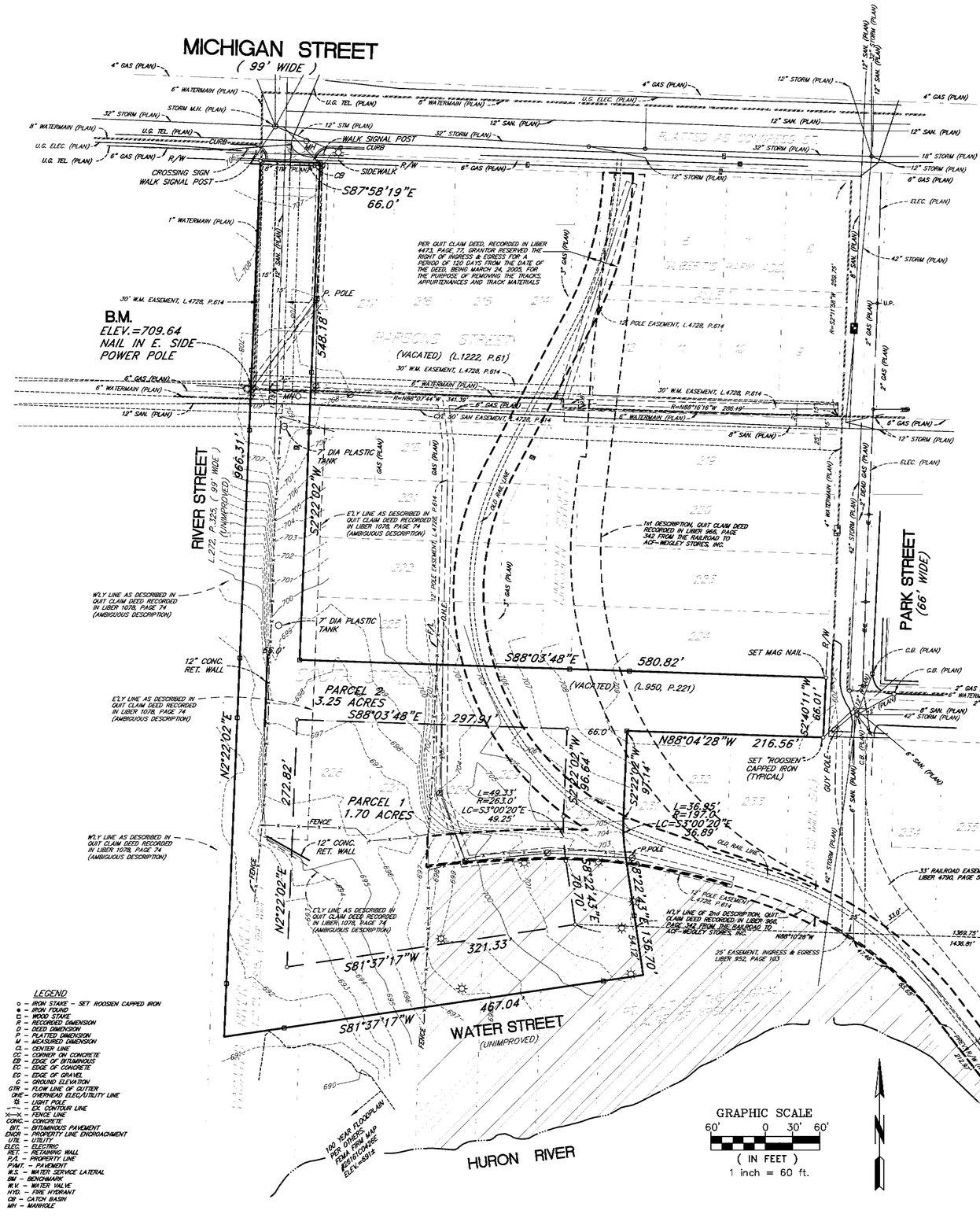
METRO CONSULTING ASSOCIATES
Relationships | Reputation | Results
800.525.6016 www.metroca.net

CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

WATER STREET FLATS
SITE PLAN
COVER SHEET

MCA JOB #:	1051-15-6832
DATE:	02-18-2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	01

k:\2015\1051 JOB FOLDERS\1051-15-6832\Drawings\Plan Sets\Site Plan\6832-SP-CV.dwg, 2/18/2015 2:04 PM, rlake



LEGEND

- o – IRON STAKE – SET ROOSIEN CAPPED IRON
- ● – IRON FOUND
- □ – WOOD STAKE
- R – RECORDED DIMENSION
- D – DEED DIMENSION
- P – PLATED DIMENSION
- M – MEASURED DIMENSION
- CL – CENTER LINE
- CC – CORNER ON CONCRETE
- EB – EDGE OF BITUMINOUS
- EC – EDGE OF CONCRETE
- EG – EDGE OF GRAVEL
- G – GROUND ELEVATION
- GTR – FLOW LINE OF GUTTER
- OHE – OVERHEAD ELEC/UTILITY LINE
- ☼ – LIGHT POLE
- ---- – EX. CONTOUR LINE
- ×—×— – FENCE LINE
- CONC – CONCRETE
- BIT. – BITUMINOUS PAVEMENT
- ENCR – PROPERTY LINE ENCROACHMENT
- UTIL – UTILITY
- ELEC – ELECTRIC
- RET – RETAINING WALL
- P/L – PROPERTY LINE
- PVMT. – PAVEMENT
- W.S. – WATER SERVICE LATERAL
- BM – BENCHMARK
- W.V. – WATER VALVE
- HYD. – FIRE HYDRANT
- CB – CATCH BASIN
- MH – MANHOLE

EXCEPTIONS

1. Any discrepancies or conflicts in boundary lines, any shortages in area, or any encroachment or overlapping of improvements. (SEE DRAWING)

2. Any facts, rights, interest or claims which are not shown by the public record but which could be ascertained by an accurate survey of the land or by making inquiry of persons in possession thereof. (DOES NOT AFFECT THE SURVEY DRAWING)

3. Easements, liens or encumbrances or claims thereof, which are not shown by the public records. (DOES NOT AFFECT THE SURVEY DRAWING)

4. Any lien, or right to lien for services, labor or material imposed by law and not shown by the public records. (DOES NOT AFFECT THE SURVEY DRAWING)

5. Taxes and Assessments not due and payable at Commitment Date. (DOES NOT AFFECT THE SURVEY DRAWING)

6. The terms, provisions and conditions contained in that certain Quit Claim Deed recorded July 24,1975 in Liber 1518, Page 122. (DOES NOT APPEAR TO AFFECT PARCELS 1 OR 2)

7. The terms, provisions and conditions contained in that certain Consent Judgment recorded April 15, 2009 in Liber 4728, Page 614 and Order Satisfying Judgment and Quieting Title recorded May 7, 2010 in Liber 4790, Page 580. (SEE DRAWING)

8. Easements for public utilities lying with the vacated streets, roads, alleys and lots recorded in Liber 618, Page 447; Liber 941, Page 506; Liber 950, Page 221; Liber 952, Page 103; and Liber 1222, Page 61. (SEE DRAWING)

9. Underground Line Permit Easement granted to The Detroit Edison Company disclosed by instrument recorded in Liber 983, Page 239, Washtenaw County Records. (SEE NOTE)

10. Sanitary Sewer Easement and Storm Sewer Easement created by instrument recorded in Liber 1163, Page 343, Washtenaw County Records. (DOES NOT APPEAR TO TOUCH PARCEL)

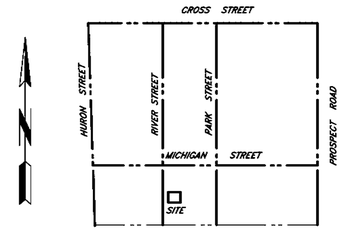
11. Portion of said property may lie within the 100–year Flood Plain as disclosed by instruments recorded in Liber 1174, Page 446 and Liber 1174, Page 468. (PARCEL LIES OUTSIDE OF FLOOD PLAIN AS SHOWN ON DRAWING)

12. Rights of the United States, State of Michigan and the public for commerce, navigation, recreation and fishery, in any portion of the land bordering on or comprising the bed of Huron River. (PARCEL DOES NOT TOUCH THE HURON RIVER)

13. The nature, extent or lack of riparian rights, or the riparian rights of riparian owners and the public, in and to the use of waters of Huron River. (PARCEL DOES NOT TOUCH THE HURON RIVER)

14. Any rights, title, interest or claim thereof to that portion of the land taken, used or granted for streets, roads or highways. (SEE DRAWING)

15. Rights of tenants under unrecorded leases. (DOES NOT AFFECT THE SURVEY DRAWING)



LOCATION MAP

LEGAL DESCRIPTION

PARCEL 1 – Fee:
Part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1436.81 feet to the Place of Beginning; thence S81°37'17"W 321.33 feet; thence N2°22'02"E 272.82 feet; thence S88°03'48"E 297.91 feet; thence S2°22'02"W 96.64 feet; thence Southerly 49.33 feet along a 263.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 49.25 feet; thence S8°22'43"E 70.70 feet to the Place of Beginning.

PARCEL 2 – Infrastructure:
Part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1369.75 feet to the Place of Beginning; thence S8°22'43"E 54.12 feet; thence S81°37'17"W 467.04 feet; thence N2°22'02"E 966.31 feet to the South right of way line of Michigan Street (99 feet wide); thence S87°58'19"E 66.0 feet along said South line; thence S2°22'02"W 548.18 feet; thence S88°03'48"E 580.82 feet to the West line of Park Street (66 feet wide); thence S2°40'11"W 66.01 feet along said West line; thence N88°04'28"W 216.56 feet; thence S2°22'02"W 97.14 feet; thence Southerly 36.95 feet along a 197.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 36.89 feet; thence S8°22'43"E 82.58 feet to the Place of Beginning. Except that part of Section 9, T3S, R7E, City of Ypsilanti, Washtenaw County, Michigan, described as: Commencing at the East 1/4 corner of said Section; thence S1°49'34"W 328.02 feet along the East line of said Section; thence N88°10'26"W 1436.81 feet to the Place of Beginning; thence S81°37'17"W 321.33 feet; thence N2°22'02"E 272.82 feet; thence S88°03'48"E 297.91 feet; thence S2°22'02"W 96.64 feet; thence Southerly 49.33 feet along a 263.0 foot radius curve to the left, the long chord of which bears S3°00'20"E 49.25 feet; thence S8°22'43"E 70.70 feet to the Place of Beginning.

To: MSHDA, JP Morgan Chase, Herman & Kittle Properties, Inc., Water Streets Flats Limited Dividend Housing Association Limited Partnership, and First American Title Insurance Company:
This is to certify that this map or plat and the survey on which it is based were made in accordance with the "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys", jointly established and adopted by ALTA and NSPS in 2005, and includes items 1–4, 6, 7(c) and (b), 8–11b, and 16–18 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, the undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Michigan, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

(2) Further, the undersigned certifies that there are no encroachments across the property except as may be shown; and that this map or plat of the property discloses all of the easements and rights–of–way as set forth in the revised First American Title Insurance Company Commitment No. NCS–649839–INDY, and dated July 31, 2014; and that all wetlands located on the property and party walls affecting any buildings are shown thereon.

Kevin Roosien, PS#31604 Date: February 28, 2014

STATE OF MICHIGAN
KEVIN ROOSIEN
LAND SURVEYOR
No. 31604
PROFESSIONAL SURVEYOR

NOTES:
1. According to FEMA Firm Map #26161C0426E, dated April 3, 2013, the 100 year flood plain elevation is approximately located at elevation 691, and does not appear to affect this parcel.

2. Title Insurance was done by First American Title Insurance Company, commitment number: NCS–649839–INDY, effective date: July 31, 2014.

3. Item number 9 in said title commitment did not have all of the recorded pages attached, and cannot determine at this point if the easement affects said parcel.

4. Item number 10 in said commitment (Schedule B, Section Two) does not appear to affect said parcel.

5. There does not appear to be any conditions relative to Table A ALTA requirement items 16–19 that affect subject parcel.

6. No wetlands were observed during the course of the field survey. However, the entire site was covered by snow, and ground conditions were obscured from visual inspection. An official wetlands study was not done as a part of this project.

ZONING: B4 GENERAL BUSINESS DISTRICT

Building Setback Requirements:*
*(*Other variables could change the below minimums)*

Front: Not less than 30 feet
Side: Not less than 3 feet
Rear: Not less than 10 feet

Height Regulations:
Building shall not exceed Six(6) Stories or 75 feet in height, whichever is less

REVISIONS:
SEPTEMBER 16, 2014 (change legl. update commitment date & certification)
DATE: FEBRUARY 28, 2014
REVISIONS MARCH 3, 2014
MARCH 6, 2014
MARCH 28, 2014
APRIL 25, 2014

DRAWN BY: KR
APPROVED BY: KR

SERVING THE NEEDS OF OUR CLIENTS SINCE 1907

Roosien & Associates
SURVEYING AND ENGINEERING
5055 PLAINFIELD AVE. NE GRAND RAPIDS, MI 49525
TELE. (616) 361-7220
FAX (616) 361-1822

ALTA/ACSM LAND TITLE SURVEY
WATER STREET FLATS
SECTION 9, T3S, R7E
CITY OF YPSILANTI, WASHTENAW CO., MI.

CLIENT:
HERMAN AND KITTLE PROP. INC
500 E. 96TH ST. SUITE 300
INDIANAPOLIS, IN 46240

PROJECT NO.
140106

SHEET
1 of 1

BUILDING CALCULATIONS:

TOTAL FLOOR AREA (NET)	±99,626 SF
TOTAL FLOOR AREA (GROSS)	±103,918 SF

	1 BR UNIT	2 BR UNIT	3 BR UNIT	4 BR UNIT–END	4 BR UNIT–MID	TOTAL UNITS
FLOOR 1	0	0	8	4	2	14
FLOOR 2	8	14	0	0	0	22
FLOOR 3	8	14	0	0	0	22
FLOOR 4	8	14	0	0	0	22
TOTAL UNITS	24	42	8	4	2	80

LAYOUT NOTES:

1. ALL DIMENSIONS ARE MEASURED TO FACE OF CURB/EDGE OF METAL UNLESS OTHERWISE NOTED.
2. WORK TO BE PERFORMED SHALL COMPLY WITH ALL MUNICIPAL CODES AND ORDINANCES.
3. ALL PARKING LOT STRIPING SHALL BE IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES."
4. ALL ACCESSIBLE PARKING, SIGNAGE, AND STRIPING SHALL BE IN ACCORDANCE WITH THE STATE OF MICHIGAN BARRIER FREE STANDARDS.
5. CONTRACTOR IS RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE REMAINS IN POST CONSTRUCTION CONDITIONS.
6. PRIOR TO COMMENCING WORK, CONTRACTOR SHALL CONTACT THE OWNER AND/OR ENGINEER SHOULD THERE BE ANY FIELD CONFLICTS WITH THE DESIGN INTENT.
7. REFER TO THE ARCHITECTURAL PLANS FOR COORDINATING THE SCOPE OF WORK RELATING TO THE BUILDING ELEVATIONS, INTERIOR, AND APPURTENANCES.
8. EASEMENT DOCUMENTATION TO BE CREATED AND RECORDED PRIOR TO FINAL CERTIFICATES OF OCCUPANCY.

SITE DATA:

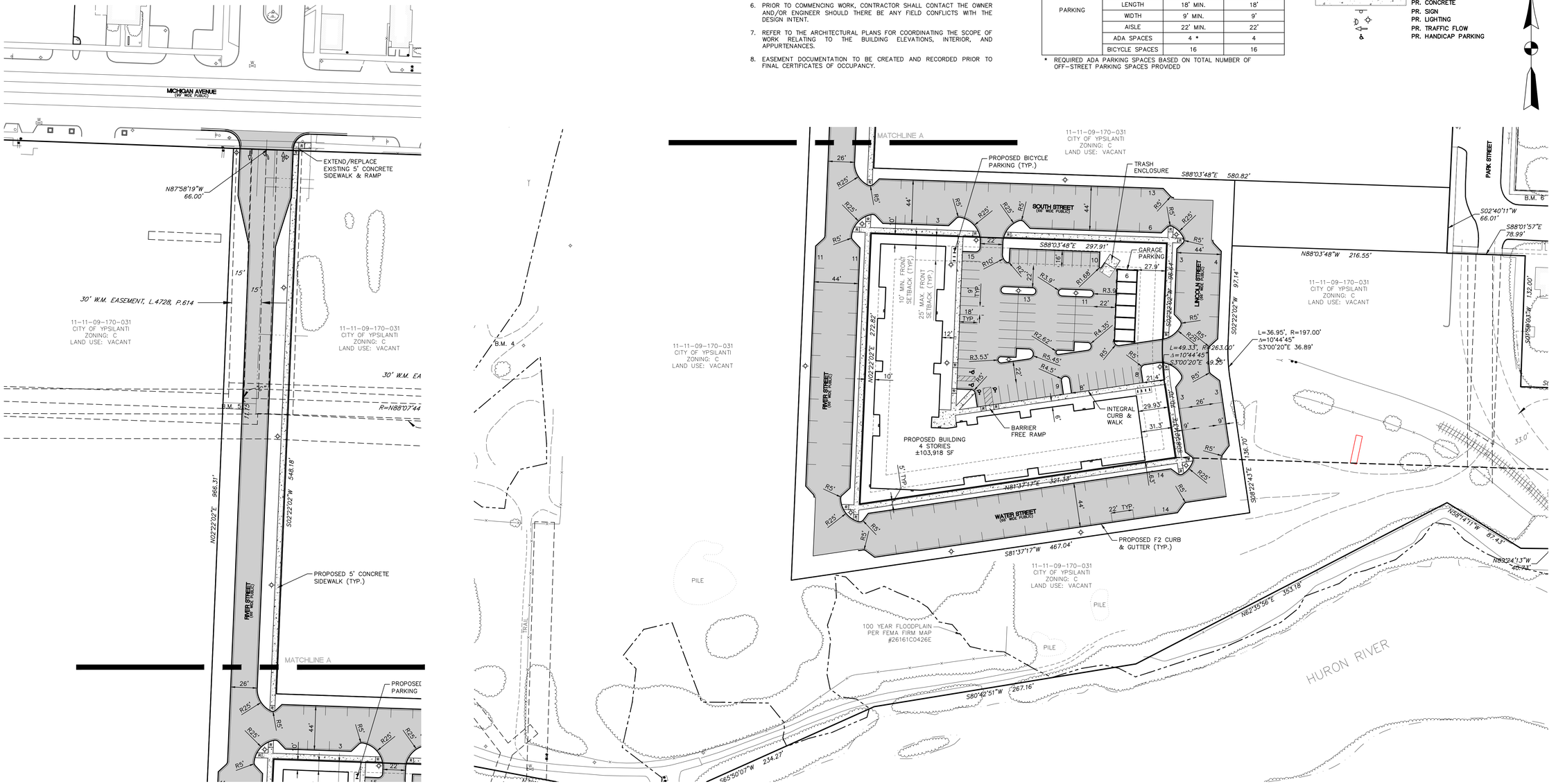
GROSS LOT AREA	1.70 AC/74,069 SF
EXISTING LAND USE	VACANT
PROPOSED LAND USE	MULTI-FAMILY RESIDENTIAL

SITE DEVELOPMENT DATA		EXISTING/REQUIRED	PROPOSED
ZONING		C	PUD
SETBACKS	FRONT	10' MIN. 25' MAX.	10' NORTH, 10' WEST, 1.6' SOUTH, 29.9' EAST
	SIDE	5' MIN.	N/A
	REAR	15' MIN.	N/A
	PARKING	10' MIN.	10' NORTH, 21.4' EAST
BUILDING INFORMATION	HEIGHT	2 STORIES MIN. 6 STORIES MAX.	4 STORIES
	FLOOR AREA	N/A	±103,918 S.F.
	UNITS	N/A	80
COVERAGE	BUILDING	N/A	38.2%
	IMPERVIOUS	N/A	75.9%
	OPEN SPACE	N/A	0.41 AC/18,020 SF
PARKING	TOTAL SPACES	95 MIN.	157
	OFF-STREET	N/A	72
	ON-STREET	N/A	85
	LENGTH	18' MIN.	18'
	WIDTH	9' MIN.	9'
	AISLE	22' MIN.	22'
	ADA SPACES	4 *	4
	BICYCLE SPACES	16	16

* REQUIRED ADA PARKING SPACES BASED ON TOTAL NUMBER OF OFF-STREET PARKING SPACES PROVIDED

LEGEND

- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND LIMITS
- EX. ADJACENT PROPERTY LINE
- EX. SECTION LINE
- EX. EASEMENT LINE
- EX. CURB/PAVEMENT
- EX. FENCE
- EX. GRAVEL
- EX. ℄ DITCH
- EX. GUARDRAIL
- EX. TREELINE
- EX. TREE (CONIFEROUS)
- EX. TREE (DECIDUOUS)
- EX. SIGN
- EX. MAILBOX
- FOUND IRON PIPE
- FOUND IRON ROD
- FOUND PK NAIL
- FOUND CONC. MONUMENT
- SET IRON ROD
- SET MAG NAIL
- EX. SECTION CORNER
- SOIL BORING
- PR. SPOT ELEVATION
- PR. CONTOUR
- PR. DRAINAGE ARROW
- PR. EASEMENT LINE
- PR. SETBACK LINE
- PR. CURB/PAVEMENT
- PR. FENCE
- PR. SIDEWALK RAMP
- PR. ASPHALT PAVEMENT
- PR. CONCRETE
- PR. SIGN
- PR. LIGHTING
- PR. TRAFFIC FLOW
- PR. HANDICAP PARKING



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

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ISSUED FOR:
DATE:
REV:

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CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

WATER STREET FLATS

SITE PLAN

LAYOUT PLAN

GRAPHIC SCALE
0 25 50 100
1 inch = 50 feet
(24"x36" DRAWINGS ONLY)

MCA JOB #:	1051-15-6832
DATE:	02-18-2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	03

STORM WATER MANAGEMENT NARRATIVE

THE WATER STREET REDEVELOPEMENT PROPERTY HISTORICALLY HAS BEEN DEVELOPED AS COMMERCIAL/INDUSTRIAL USES. THE MAJORITY OF THE SURFACE IMPROVEMENTS HAVE BEEN DEMOLISHED IN THE SITES CURRENT CONDITION. DRAINAGE ACCROSS THE PROPERTY FLOWS GENERALLY FROM THE NORTH TO THE SOUTH UNRESTRICTED TO THE HURON RIVER.

THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A MULTI-FAMILY DEVELOPEMENT ON A PORTION OF THE WATER STREET REDEVELOPEMENT PROPERTY. THE PROPOSED IMPROVEMENTS WILL INCLUDE A PARKING LOT, PUBLIC ROADS AROUND THE PARCEL AS WELL AS A PUBLIC ROAD CONNECTION TO MICHIGAN AVENUE, ASSOCIATED UTILITIES, A STORM SEWER SYSTEM AND A STORM WATER MANAGEMENT BASIN.

THE WASHTENAW COUNTY WATER RESOURCES COMMISSION (WCWRC) STORM WATER MANAGEMENT STANDARDS ALLOW FOR FLEXIBILITY IN THE DETENTION REQUIREMENTS WHEN A PROJECT IS LOCATED AT THE DOWN STREAM END OF A WATERSHED. BECAUSE THE PROJECT IS LOCATED DIRECTLY ADJACENT TO THE HURON RIVER, THE STORM WATER MANAGEMENT SYSTEM HAS BEEN DESIGNED TO DETAIN THE BANKFULL FLOOD STORM (AS DEFINED BY THE WCWRC STANDARDS) FOR THE PROPOSED IMPOVEMENTS INCLUDING THE SITE AND THE ROAD WORK PROPOSED TO BE CONSTRUCTED AS PART OF THIS PROJECT. THE STORM SEWER HAS BEEN SIZED TO ACCOMODATE THE 10-YEAR FLOW FOR THE SITE, THE ROAD WORK PROPOSED AS A PART OF THIS PROJECT, AND THE FUTURE LOTS TO THE NORTH AND EAST. IT HAS BEEN ASSUMED THAT THE FUTURE LOTS WILL BE DEVELOPED AT A RUNOFF COEFFICIENT OF 0.85. AN OUTLET CONTROL STRUCTURE IN THE PROPOSED POND WILL CONTROL THE RELEASE OF RUNOFF TO THE HURON RIVER AT THE RATE LESS THAN OR EQUAL TO 0.15 CFS/ACRE.

GRADING NOTES:

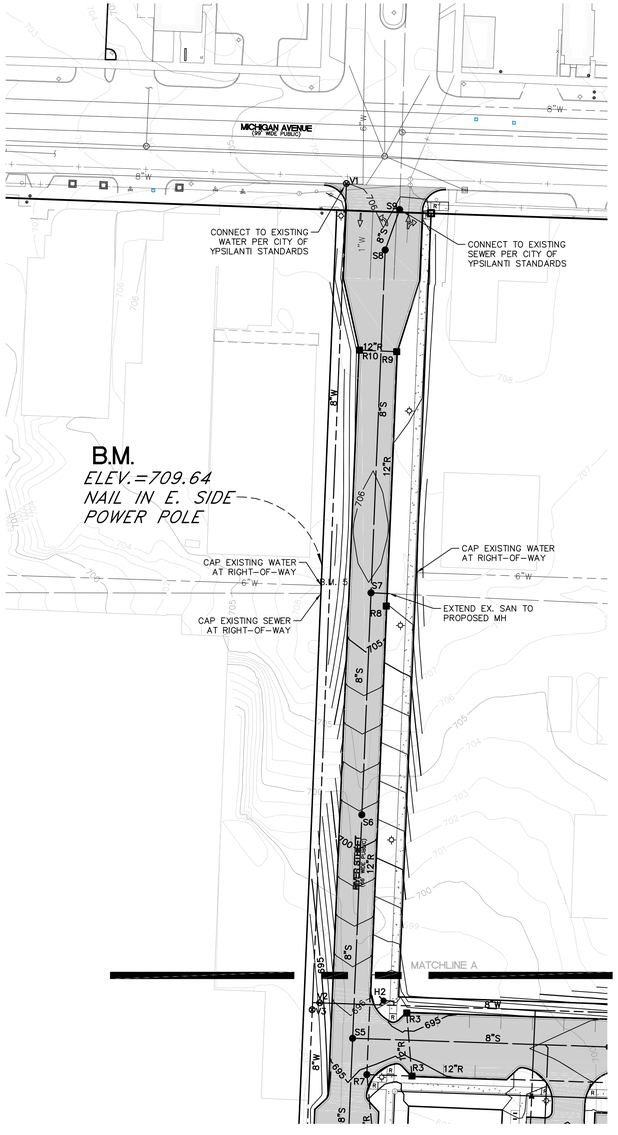
1. THE PROPOSED CONTOURS AND SLOPES ARE APPROXIMATE AS SHOWN.
2. ALL PROPOSED SPOT GRADES SHOWN AT THE BACK OF CURB OR TOP EDGE OF WALK, UNLESS OTHERWISE NOTED. NOTATION CODES ARE AS FOLLOWS: FF=FINISHED FLOOR, FG=FINISHED GRADE, TP=TOP OF PAVEMENT, RIM=TOP OF GRATE OR MANHOLE, TW=TOP OF WALL, BW=BOTTOM OF WALL.
3. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT FOR CONSTRUCTION RECOMMENDATIONS AND REQUIREMENTS REGARDING SUB-SURFACE SOIL CONDITIONS, GROUNDWATER CONDITIONS, SITE PREPERATION, EXCAVATION, PAVEMENT CROSS-SECTIONS, AND MATERIALS TESTING.
4. ANY SOIL RETAINING SYSTEM OR WALL SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL OR GEOTECHNICAL ENGINEER. A DETAIL OF THE RETAINING WALL WITH CALCULATIONS TO BE SUBMITTED TO THE REVIEW AGENCY AS REQUIRED.
5. WHEN PAVED AREAS ARE EXCAVATED, ASPHALT AREAS SHALL BE SAW-CUT AND REMOVED TO A DISTANCE EQUAL TO THE DEPTH OF EXCAVATION. CONCRETE SHALL BE REMOVED TO THE FIRST JOINT PAST THE DISTANCE EQUAL TO THE DEPTH OF EXCAVATION. COMPACTED SAND BACKFILL IS REQUIRED IN ALL EXCAVATIONS WITHIN A 1:1 SLOPE OF EXISTING OR PROPOSED PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE POSITIVE DRAINAGE REMAINS DURING AND IN POST CONSTRUCTION CONDITIONS AND NO ADVERSE IMPACTS WILL OCCUR TO NEIGHBORING PROPERTIES DURING AND AFTER COMPLETION OF CONSTRUCTION.
7. ALL SIDEWALK PLANNED TO BE ACCESSIBLE SHALL BE CONSTRUCTED WITH CROSS SLOPES LESS THAN 2%.
8. ALL SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED PER THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION DETAILS AND IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT.
9. THE STORMWATER POND SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO MAJOR EARTH DISTURBANCE ACTIVITIES.

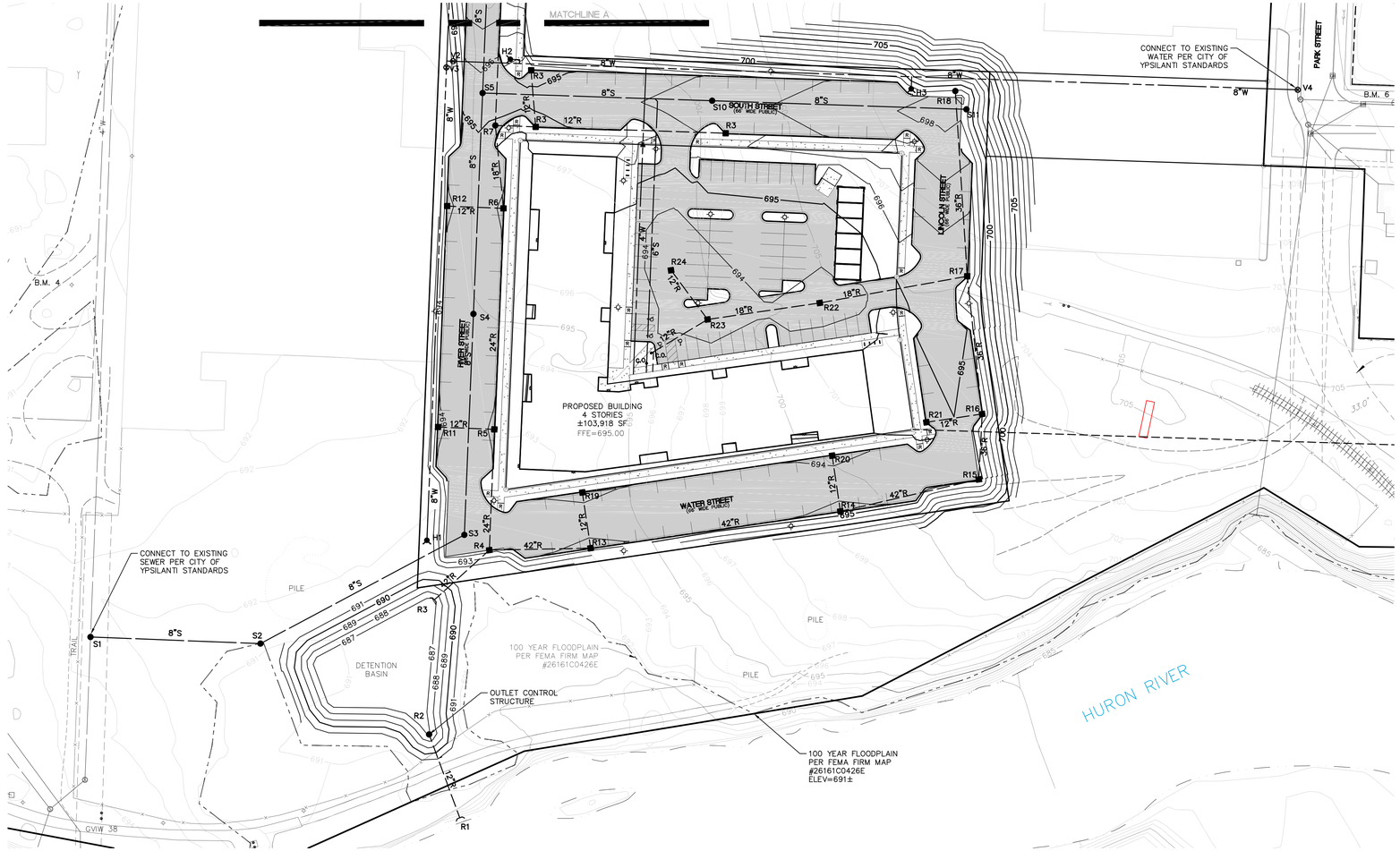
LEGEND

× 656.5	EX. SPOT ELEVATION
652	EX. CONTOUR
	EX. WETLAND LIMITS
	EX. ADJACENT PROPERTY LINE
	EX. SECTION LINE
	EX. EASEMENT LINE
	EX. CURB/PAVEMENT
	EX. FENCE
	EX. GRAVEL
	EX. ℄ DITCH
	EX. GUARDRAIL
	EX. TREELINE
	EX. TREE (CONIFEROUS)
	EX. TREE (DECIDUOUS)
	EX. SIGN
MB	EX. MAILBOX
I.F.-RR	FOUND IRON PIPE
I.F.-ROD	FOUND IRON ROD
F.N.-NAIL	FOUND PK NAIL
	FOUND CONC. MONUMENT
S.I.R.	SET IRON ROD
S.M.N.-NAIL	SET MAG NAIL
	EX. SECTION CORNER
	SOIL BORING
W	EX. WATER MAIN
WV	EX. WATER VALVE
H	EX. HYDRANT
WM	EX. WATER MANHOLE
W	EX. WELL
WM	EX. WATER METER
	EX. STORM SEWER
SB	EX. STORM INLET/CATCH BASIN
SM	EX. STORM MANHOLE
	EX. STORM END SECTION
	EX. SANITARY SEWER
SA	EX. SANITARY MANHOLE
	EX. UNDERGROUND GAS
	EX. GAS VALVE
	EX. OVERHEAD ELECTRIC
	EX. UNDERGROUND ELECTRIC
	EX. UNDERGROUND CABLE
T	EX. TELEPHONE MANHOLE
E	EX. ELECTRIC MANHOLE
E	EX. ELECTRIC METER
G	EX. GAS METER
	EX. LIGHT POLE
	EX. TRAFFIC SIGNAL BOX
?	EX. UNIDENTIFIED MANHOLE
	EX. TRAFFIC SIGNAL POLE
	EX. UTILITY POLE
	EX. GUY WIRE

× 656.5	PR. SPOT ELEVATION
653	PR. CONTOUR
	PR. DRAINAGE ARROW
	PR. EASEMENT LINE
	PR. SETBACK LINE
	PR. CURB/PAVEMENT
R	PR. FENCE
	PR. SIDEWALK RAMP
	PR. ASPHALT PAVEMENT
	PR. CONCRETE
	PR. GUARDRAIL
	PR. SIGN
	PR. WATER MAIN
	PR. WATER VALVE
	PR. HYDRANT
	PR. WATER VALVE IN MANHOLE
	PR. WELL
	PR. REDUCER
	PR. STORM SEWER
	PR. STORM INLET/CATCH BASIN
	PR. STORM MANHOLE
	PR. STORM END SECTION
	PR. SANITARY SEWER
C.O.	PR. SANITARY MANHOLE
1	PR. CLEANOUT
	PR. UTILITY CROSSING LOCATION
	PR. UNDERGROUND GAS
	PR. GAS VALVE
	PR. LIGHT POLE
	TREE PROTECTION FENCE
	DEMO UTILITY/ CURB
	DEMO PAVEMENT AND CURB
	DEMO BUILDING
	DEMO EXISTING TREE
	PR. SILT FENCE
	LIMITS OF DISTURBANCE
	PR. INLET FILTER
	PR. STONE/ RIP-RAP
	SOIL LIMITS
NaB	SOIL TYPE

N





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REV:	DATE:	ISSUED FOR:

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CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

WATER STREET FLATS

SITE PLAN
GRADING, UTILITY & STORM WATER MANAGEMENT PLAN

GRAPHIC SCALE
0 25 50 100
1 inch = 50 feet
(24"×36" DRAWINGS ONLY)

MCA JOB #:	1051-15-6832
DATE:	02-18-2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	04

LANDSCAPING NOTES:

1. THIS PLAN IS FOR PLANTING LOCATIONS ONLY.
2. SIZES SPECIFIED ARE MINIMUM SIZES TO BE INSTALLED.
3. IN THE EVENT THE PLANT LIST DOES NOT MATCH THE PLAN, THE PLAN SHALL TAKE PRECEDENCE.
4. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY STANDARDS IN A NEAT, HEALTHY AND WEED-FREE CONDITION, FREE FROM REFUSE AND DEBRIS. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIAL IS TO BE REPLACED WITHIN ONE YEAR, OR THE NEXT APPROPRIATE PLANTING PERIOD, WHICHEVER COMES FIRST.
5. ALL EXISTING TREES TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE END OF THE FOLLOWING PLANTING SEASON.
6. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. PLANT MATERIAL IS TO BE LOCATED SUCH THAT IT WILL NOT INTERFERE WITH ANY UNDERGROUND OR OVERHEAD UTILITIES. PLANTINGS WITHIN 15 FEET OF A FIRE HYDRANT SHALL NOT EXCEED 6 INCHES IN HEIGHT.
7. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN IN THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROXIMATELY 1/3 OF THE ROOT BALL ABOVE THE GRADE.
8. REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. PEEL BACK THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE ANY BURLAP AROUND TREE TRUNKS.
9. ALL LANDSCAPE AREAS SHALL BE EXCAVATED OF ALL BUILDING/CONSTRUCTION MATERIAL AND POOR SOILS TO A DEPTH OF 18"–24" AND BACKFILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL.
10. ALL DISTURBED UNPAVED AREAS ARE TO BE SPREAD WITH A MINIMUM 4 INCHES OF TOPSOIL AND SEEDED/SODDED.
11. ALL LANDSCAPED AREAS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY. NEWLY PLANTED MATERIALS SHALL BE REGULARLY WATERED UNTIL ESTABLISHED.
12. IF AN APPROVED SPECIES IS NO LONGER ACCEPTABLE DUE TO SUCH THINGS AS INFESTATION OR DISEASE, A SUITABLE SIMILAR SPECIES SHALL BE USED AS REPLACEMENT. ANY PLANT SUBSTITUTIONS SHALL HAVE CITY APPROVAL PRIOR TO INSTALLATION.
13. RECOMMENDED PLANTING DATES ARE MARCH 1 TO MAY 15 FOR ALL MATERIALS AND OCTOBER 15 TO DECEMBER 15 FOR DECIDUOUS MATERIALS. PLANTINGS OUTSIDE THESE DATES SHALL HAVE PRIOR CITY APPROVAL, AND MAY REQUIRE SPECIAL TREATMENT, SUCH AS EXTRA WATERING OR MULCHING, TO INCREASE SURVIVAL POTENTIAL.
14. PLANT MATERIAL SHALL NOT INTERFERE WITH SIGHT DISTANCE TRIANGLES.

LANDSCAPING CALCULATIONS:

GREENBELT/STREET TREES – RIVER STREET (±273 LF)

	REQUIRED	PROPOSED
TREES:	9	9

GREENBELT/STREET TREES – SOUTH STREET (±298 LF)

	REQUIRED	PROPOSED
TREES:	10	10
SHRUBS:	N/A	23

GREENBELT/STREET TREES – LINCOLN STREET (±216 LF)

	REQUIRED	PROPOSED
TREES:	7	7
SHRUBS:	N/A	24

GREENBELT/STREET TREES – WATER STREET (±321 LF)

	REQUIRED	PROPOSED
TREES:	11	11

FOUNDATION LANDSCAPING (1,035 LF)

	REQUIRED	PROPOSED
WIDTH:	6' MIN.	6'–12'
SHRUBS:	207	207

PARKING LOT INTERIOR (72 SPACES)

	REQUIRED	PROPOSED
TREES:	9	9

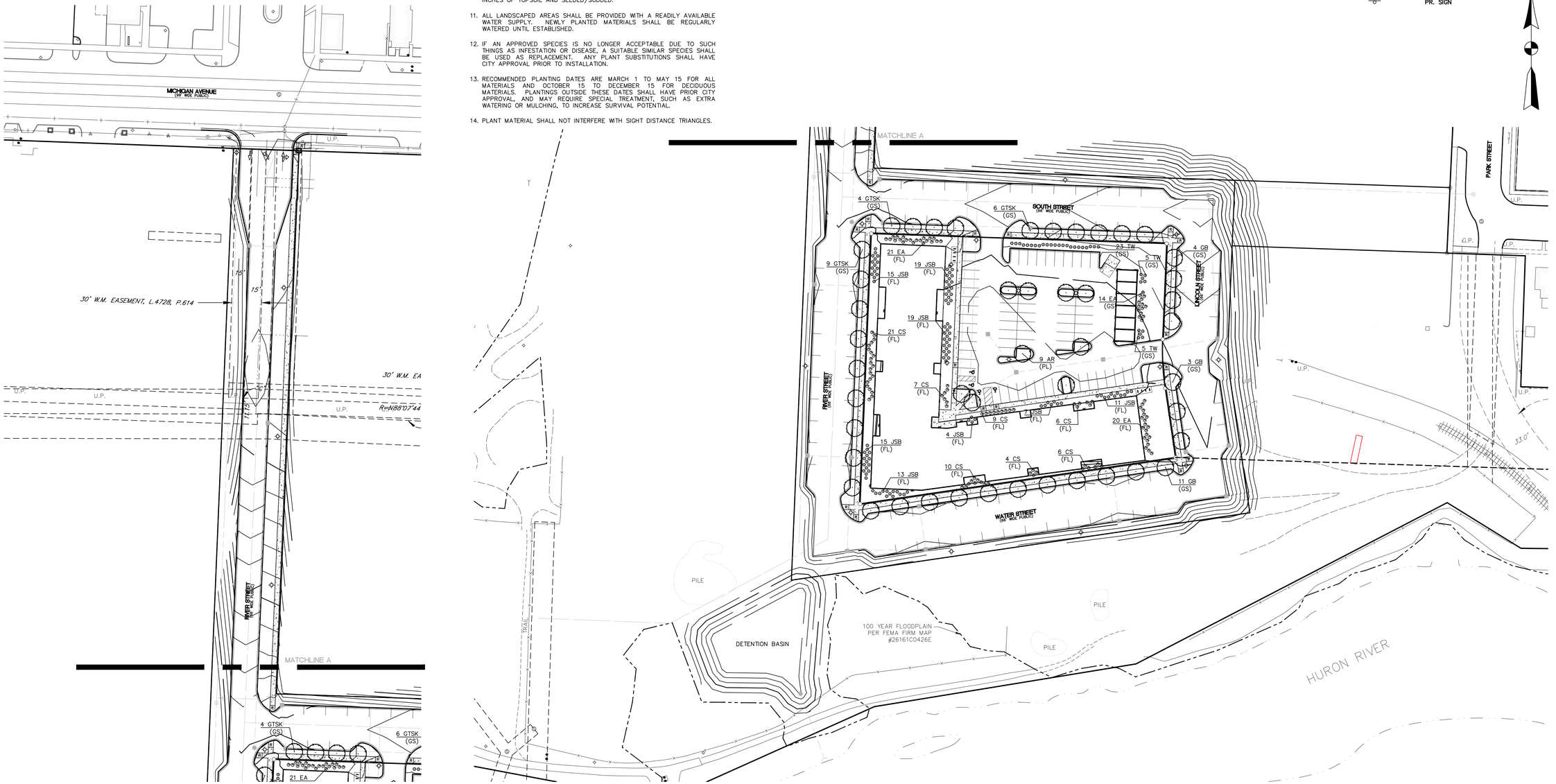
PROPOSED LANDSCAPING DESIGNATIONS ARE AS FOLLOWS:
(GS) – GREENBELT/STREET TREES
(FL) – FOUNDATION LANDSCAPING
(PL) – PARKING LOT INTERIOR

PLANTING LIST:

KEY	QTY.	SPECIES	MIN. SIZE	SPEC.
AR	9	ACER RUBRUM 'RED MAPLE'	2.5" CAL.	B&B
GB	18	GINKGO BILOBA 'GINKGO (MALE VARIETY ONLY)'	2.5" CAL.	B&B
GTSK	19	GLEDITSIA TRIA. V INERMIS 'SKYLINE' SKYLINE HONEYLOCUST	2.5" CAL.	B&B
CS	63	CORNUS STOLONIFERA 'REDOSIER DOGWOOD'	24" HT.	CONT.
EA	55	EUONYMUS ALATUS 'COMPACTUS' COMPACT BURNING BUSH	18" HT.	CONT.
JSB	103	JUNIPERUS SABINA 'BROADMOOR' BROADMOOR JUNIPER	18" SPD.	CONT.
TW	33	TAXUS X MEDIA 'WARDII' WARD'S YEW	24" HT.	CONT.

LEGEND

- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND LIMITS
- EX. ADJACENT PROPERTY LINE
- EX. SECTION LINE
- EX. EASEMENT LINE
- EX. CURB/PAVEMENT
- EX. FENCE
- EX. GRAVEL
- EX. ℄ DITCH
- EX. GUARDRAIL
- EX. TREELINE
- EX. TREE (CONIFEROUS)
- EX. TREE (DECIDUOUS)
- EX. SIGN
- EX. MAILBOX
- FOUND IRON PIPE
- FOUND IRON ROD
- FOUND PK NAIL
- FOUND CONC. MONUMENT
- SET IRON ROD
- SET MAG NAIL
- EX. SECTION CORNER
- SOIL BORING
- PR. SPOT ELEVATION
- PR. CONTOUR
- PR. DRAINAGE ARROW
- PR. EASEMENT LINE
- PR. SETBACK LINE
- PR. CURB/PAVEMENT
- PR. FENCE
- PR. SIDEWALK RAMP
- PR. ASPHALT PAVEMENT
- PR. CONCRETE
- PR. GUARDRAIL
- PR. SIGN



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

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ISSUED FOR:
DATE:
REV.:

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CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

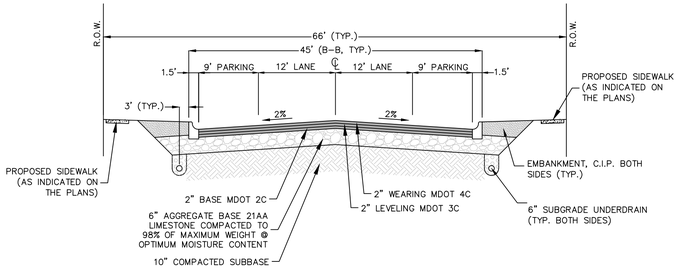
WATER STREET FLATS

SITE PLAN

LANDSCAPE PLAN

GRAPHIC SCALE
0 25 50 100
1 inch = 50 feet
(24"x36" DRAWINGS ONLY)

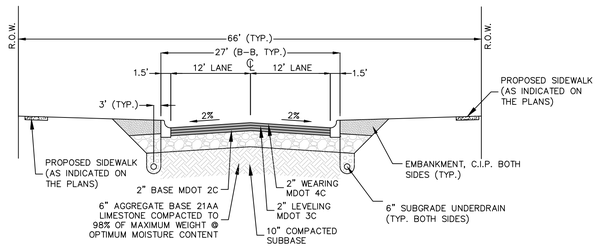
MCA JOB #:	1051-15-6832
DATE:	02-18-2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	05



2 LANE ROAD WITH PARKING

NOT TO SCALE

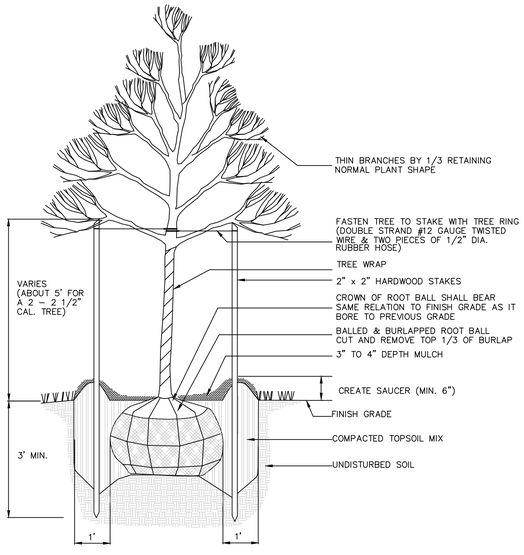
*NOTE: FINAL CROSS-SECTION SHALL BE BASED ON RECOMMENDATION OF GEOTECHNICAL ENGINEER



2 LANE ROAD

NOT TO SCALE

*NOTE: FINAL CROSS-SECTION SHALL BE BASED ON RECOMMENDATION OF GEOTECHNICAL ENGINEER

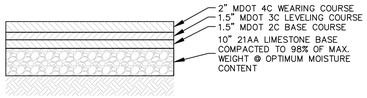


NOTES:

1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE
3. REMOVE TREE RINGS, TREE WRAP AND STAKES TWO YEARS AFTER INSTALLATION
4. WATER TREE THOROUGHLY SUBSEQUENT TO INSTALLATION

DECIDUOUS TREE PLANTING DETAIL BALLED AND BURLAPPED

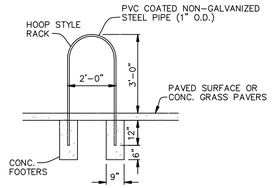
NOT TO SCALE

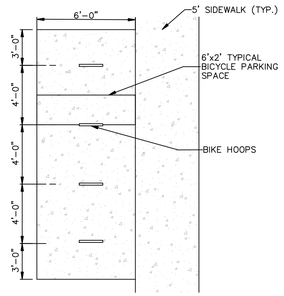


(FINAL CROSS-SECTION SHALL BE BASED ON RECOMMENDATION OF GEOTECHNICAL ENGINEER)

MULTI-FAMILY PARKING LOT

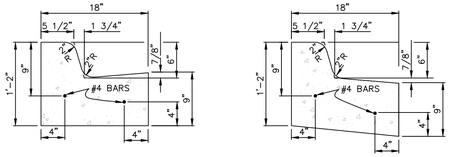
NOT TO SCALE





BIKE RACK DETAIL

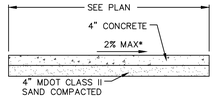
NOT TO SCALE



PITCH IN CURB PITCH OUT CURB

F2 CURB DETAIL

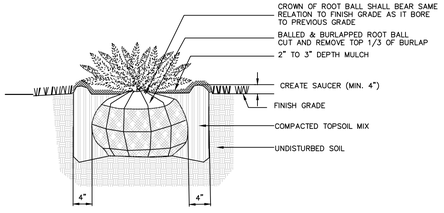
NOT TO SCALE



*CROSS-SLOPE PITCHED TOWARD DRIVE/PARKING AREAS

CONCRETE SIDEWALK SECTION

NOT TO SCALE

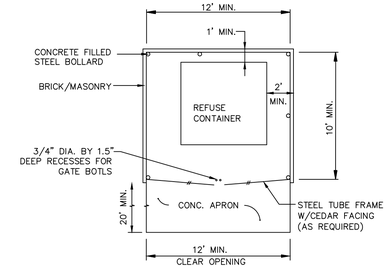


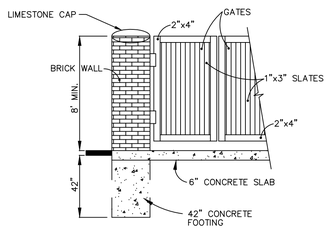
NOTES:

1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. WATER SHRUB THOROUGHLY SUBSEQUENT TO INSTALLATION

SHRUB PLANTING DETAIL

NOT TO SCALE

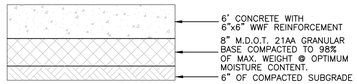




NOTE:
1. ENCLOSURE TO BE A MINIMUM 8 FOOT IN HEIGHT.

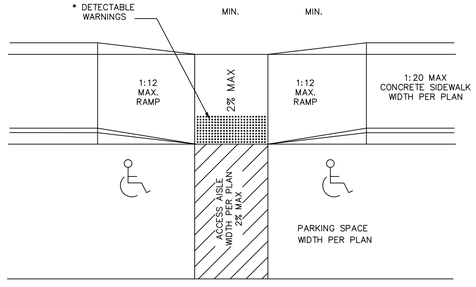
TRASH ENCLOSURE DETAIL

NOT TO SCALE



CONCRETE DUMPSTER PAD

NOT TO SCALE



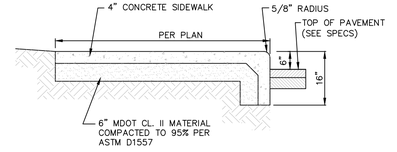
HANDICAP RAMP DETAIL

*DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23 MM), A HEIGHT OF NOMINAL 0.2 IN (5MM) AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN (60MM) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.

BARRIER FREE RAMP DETAIL

NOT TO SCALE



INTEGRAL CURB AND SIDEWALK

NOT TO SCALE

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REV:	DATE:	ISSUED FOR:

CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

WATER STREET FLATS

SITE PLAN
DETAIL SHEET

MCA JOB #:	1051-15-6832
DATE:	02-18-2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	06

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D-Series Size 0
LED Area Luminaire

d"series

Catalog Number
Notes
Type

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

Specifications

EPA:	0.8 ft² (.07 m²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)

Ordering Information EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Control options	Other options	Finish
DSX0 LED	Forward optics: 20C 20 LEDs (one engine); 40C 40 LEDs (two engines). Rotated optics: 30C 30 LEDs (one engine)	530 530 mA; 700 700 mA; 1000 1000 mA	30K 3000K; 40K 4000K; 50K 5000K	T1S Type I short; T2S Type II short; T2M Type II medium; T3S Type III short; T3M Type III medium; T4M Type IV medium; TFTM Forward throw medium; T5VS Type V very short; T5S Type V short; T5M Type V medium; T5W Type V wide	MVOLT; 120; 208; 240; 277; 347; 480	Shipped included: SPA Square pole mounting; RPA Round pole mounting; WBA Wall bracket; SPUMBA Square pole universal mounting adaptor; RPUMBA Round pole universal mounting adaptor	Shipped installed: PER NEMA twist-lock receptacle only (no controls); DMG 0-10V dimming driver (no controls); DCR Dimmable and controllable via ROAM (no controls); PIR Motion sensor, 8-15' mounting height; PIRH Motion sensor, 15-30' mounting height; BL30 Bi-level switched dimming, 30%; BL50 Bi-level switched dimming, 50%	Shipped installed: HS House-side shield; SF Single fuse (120, 277, 347V); DF Double fuse (208, 240, 480V); L90 Left rotated optics; R90 Right rotated optics. Shipped separately: DDL Diffused drop lens	DDBXD Dark bronze; DBLXD Black; DNAXD Natural aluminum; DWHXD White; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white

Drilling — Accessories — Tenon Mounting Slipfitter** — NOTES

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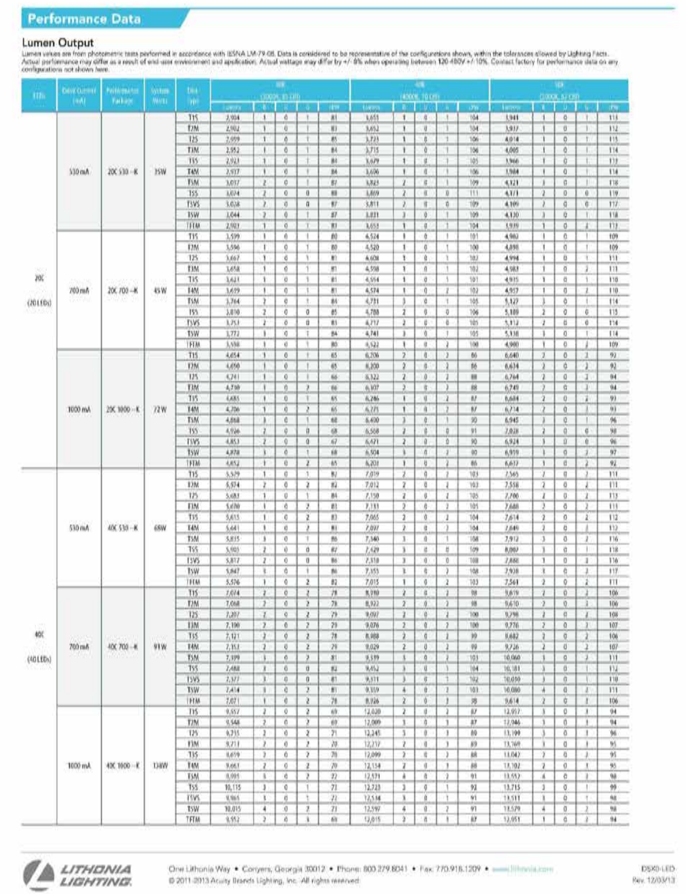

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%. Contact factory for performance data on any configurations not shown here.

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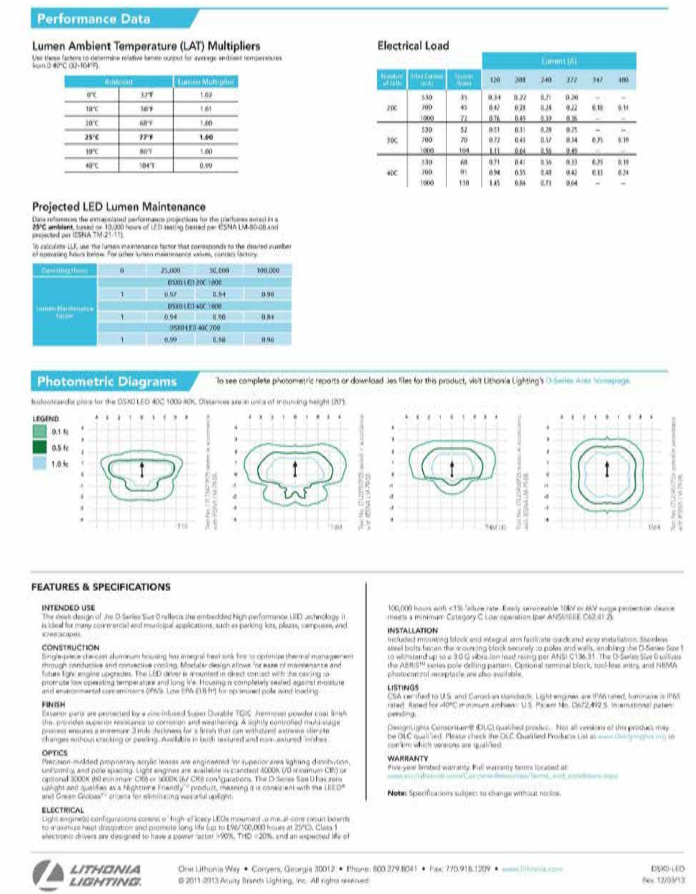
DSX0-LED Rev. 12/03/13



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Electrical Load

Projected LED Lumen Maintenance

Photometric Diagrams

FEATURES & SPECIFICATIONS

INTENDED USE — CONSTRUCTION — FINISH — OPTICS — ELECTRICAL — INSTALLATION — LISTINGS — WARRANTY

Note: Specifications subject to change without notice.

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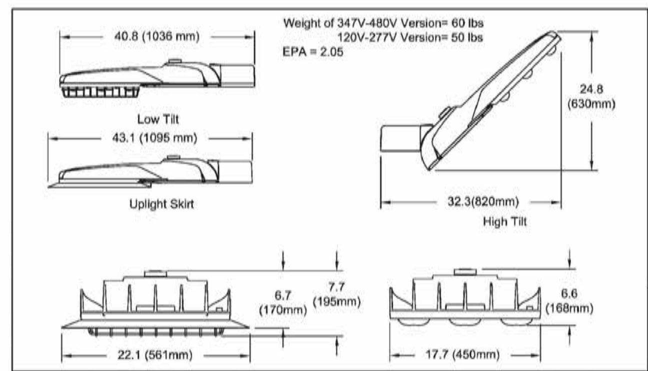
DSX0-LED Rev. 12/03/13



ORDERING INFORMATION:

MGLED

Series Code	Number of LED'S	Color Temperature	Voltage
	4= 4 COB 5= 5 COB 6= 6 COB 7= 7 COB 8= 8 COB 9= 9 COB	4K= 4000 Kelvin 5K= 5000 Kelvin	AS= 120V-277V AH= 347V-480V

Optics	Tilt Range	Mounting	Color
N = Narrow Roadway M = Medium Roadway W = Wide Roadway F = Forward Throw (Type 4) A = Area (Type 5)	H = High (27° - 45°) L = Low (0° - 18°)	V = Vertical Tenon H = Horizontal Arm A = Architectural	G = Gray H = Graphite K = Black N = Green W = White Z = Bronze

Standard Options

NL = NEMA Label
P3 = 3 PIN NEMA Photocontrol Receptacle
P5 = 5 PIN NEMA Photocontrol Receptacle
P7 = 7 PIN NEMA Photocontrol Receptacle
DM = 0V – 10V dimmable driver
DE = ROAM Concierge/Enterprise
VE = ROAMview
PCSS = DSS 120-277V Photocontrol
PCL1 = DLL 120V Photocontrol
PCL3 = DLL 347V Photocontrol
PCL4 = DLL 480V Photocontrol
PSC = Shorting Cap
SP= Individual unit/Sample pack
US = Uplight Skirt (DLC Approved)

Special Options *

ML=Multi-Level Dimming
CLO = Constant Lumen Output
*Additional information is required from the customer. Please contact Infrastructure TSG for assistance.

Accessories

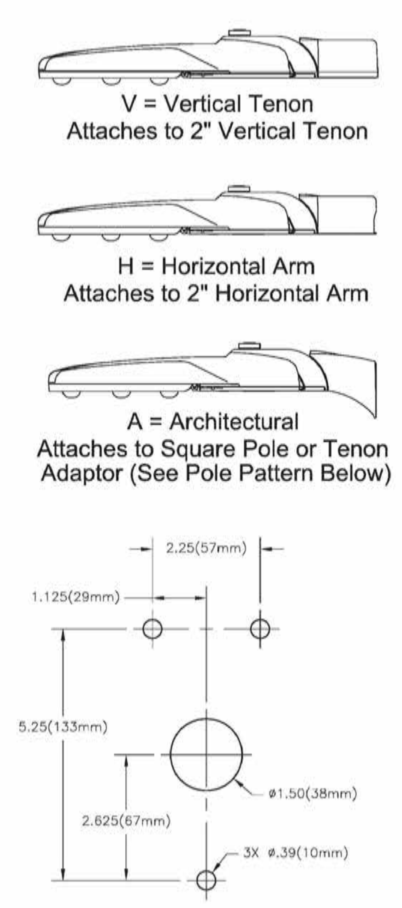
MGLEDWG = WIRE GUARD KIT

MONGOOSE LED ™ LED Roadway Lighting — Infrastructure Outdoor — HOLOPHANE® An AcuityBrandsCompany

ORDER #: TYPE: DRAWN: BGW DATE: 11/19/14 DWG #: MONGOOSE LED

1 of 4

Mounting

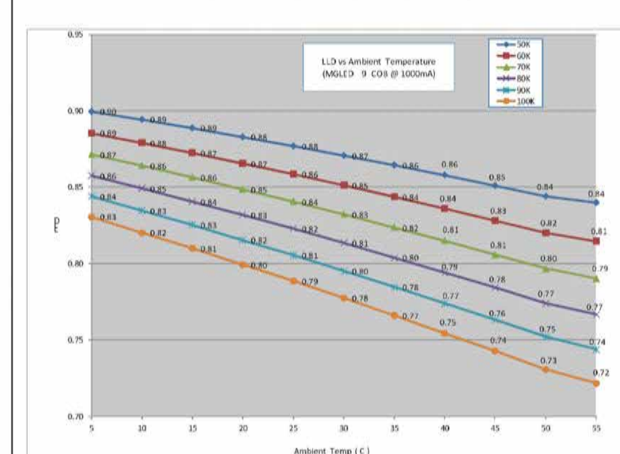


MONGOOSE LED ™ LED Roadway Lighting — Infrastructure Outdoor — HOLOPHANE® An AcuityBrandsCompany

ORDER #: TYPE: DRAWN: BGW DATE: 10/23/13 DWG #: MONGOOSE LED

2 of 4

LED Count	Distribution	Lumens	LPW	Input Watts
9 Chip	Narrow	36,507	99	367
	Medium	36,095	98	
	Wide	35,869	98	
	Forward Throw	34,420	94	
	Area	38,181	104	
8 Chip	Narrow	32,577	99	328
	Medium	32,188	98	
	Wide	32,093	98	
	Forward Throw	30,741	94	
	Area	34,068	104	
7 Chip	Narrow	28,756	99	290
	Medium	28,423	98	
	Wide	28,278	98	
	Forward Throw	27,102	93	
	Area	30,046	104	
6 Chip	Narrow	24,540	100	245
	Medium	24,299	99	
	Wide	24,140	99	
	Forward Throw	23,130	94	
	Area	25,609	105	
5 Chip	Narrow	20,631	100	206
	Medium	20,381	99	
	Wide	20,316	99	
	Forward Throw	19,413	94	
	Area	21,514	104	
4 Chip	Narrow	16,638	99	168
	Medium	16,446	98	
	Wide	16,378	97	
	Forward Throw	15,620	93	
	Area	17,357	103	



MONGOOSE LED ™ LED Roadway Lighting — Infrastructure Outdoor — HOLOPHANE® An AcuityBrandsCompany

ORDER #: TYPE: DRAWN: BGW DATE: 10/23/13 DWG #: MONGOOSE LED

3 of 4

Specifications

Optical
Performance is comparable to 150 - 400 watt HID
IP66 rated borosilicate glass optics ensure longevity and minimize dirt depreciation
4,000K CCT, 70 CRI Min. or optional 5,000K CCT, 70 CRI Min.
Available with Narrow roadway, Medium Roadway, Wide Roadway, Forward Throw, and Area Type lighting distributions

Electrical
Electronic driver has an expected life of 100,000 hours at 25°C
LED light engines are rated > 100,000 at 25°C, L70
Robust ANSI/IEEE C62.4 Category C (10kV/5kA) fixture protection is provided by a specially designed Acuity surge protection device

Mechanical
Rugged low copper diecast aluminum coupled with a rigorous 5-stage pretreatment, epoxy basecoat and polyester topcoat yield a finish that achieves a scribe creepage rating of 8 after 5,000 hours of salt spray.
Removable "power door" facilitates product installation and maintenance
Corrosion resistant stainless steel latches ensure secure closure over the long fixture life
Multiple mounting configurations allow for attachment to horizontal mast arms, pole top tenons, and direct mounting to square poles. All Mountings are 3G vibration rated per ANSI C136
Adjustable fixture tilt from 0 - 45 degrees provides flexibility to optimize lighting performance

Controls
Premium solid state locking-style photocontrol - PCSS (10 year rated life)
Extreme long life solid state locking-style photocontrol - PCLL (20 year rated life)
Multi-level dimming
DE and VE options allow the fixture to be dimmed using the ROAM control system

Warranty & Standards
5 Year limited warranty. Full warranty terms located at
http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Rated for -40C to 40C ambient
CSA Certified to US and Canadian standards

MONGOOSE LED ™ LED Roadway Lighting — Infrastructure Outdoor — HOLOPHANE® An AcuityBrandsCompany

ORDER #: TYPE: DRAWN: BGW DATE: 10/23/13 DWG #: MONGOOSE LED

4 of 4

WST LED
Architectural Wall Sconce

Catalog Number
Notes
Type

Introduction

The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity.

The WST LED is ideal for replacing existing 50 – 175W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Inverted available with WLU option only.

Specifications

Luminaire

Height:	7-1/4" (18.4 cm)
Width:	16-1/4" (41.3 cm)
Depth:	9-1/8" (23.2 cm)
Weight:	17 lbs (7.7 kg)

Optional Back Box (BBW)

Height:	4" (10.2 cm)
Width:	5-1/2" (14.0 cm)
Depth:	1-1/2" (3.8 cm)

For 3/4" NPT side-entry conduit

Ordering Information EXAMPLE: WST LED 2 10A700/40K SR3 MVOLT DDBTXD

Series	Light Engines	Performance Package	Distribution	Voltage	Mounting	Options	Finish (required)
WST LED	1 One engine (10 LEDs); 2 Two engines (20 LEDs)	700 mA options: 10A700/40K 4000K	SR2 Type II; SR3 Type III; SR4 Type IV	MVOLT; 120; 208; 240; 277; 347; 480	Shipped included: (blank) Surface mount. Shipped separately: BBW Surface-mounted back box; UTS Uplift 5 degrees	Shipped installed: PE Photoelectric cell, button type; SF Single fuse (120, 277, 347V); DF Double fuse (208, 240, 480V); DMG 0-10V dimming driver (no controls); ELCW Emergency battery backup; WLU Wet location door for up orientation; PIR Motion/ambient light sensor. Shipped separately: VG Vandal guard; WG Wire guard	DDBXD Dark bronze; DBLXD Black; DNAXD Natural aluminum; DWHXD White; DSSXD Sandstone; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white; DSSTXD Textured sandstone

Emergency Battery Operation

The emergency battery backup (ELCW option) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

WST LED 1 10A700/40K SR4 MVOLT ELCW
10' x 10' Gridlines
8' and 12' Mounting Height

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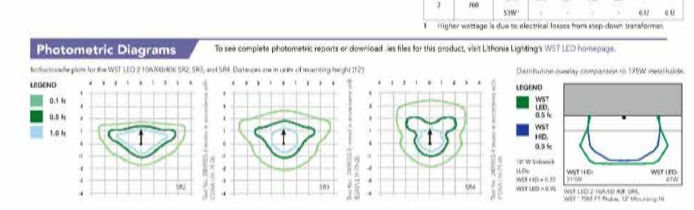

Performance Data

Lumen Output

Lumen Ambient Temperature (LAT) Multipliers

Ambient		Lumen Multiplier
0°C	32°F	1.10
10°C	50°F	1.06
20°C	68°F	1.02
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.92

Projected LED Lumen Maintenance

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.94	0.88	0.77

Electrical Load

Photometric Diagrams

FEATURES & SPECIFICATIONS

INTENDED USE — CONSTRUCTION — FINISH — OPTICS — ELECTRICAL — INSTALLATION — LISTINGS — WARRANTY

Note: Specifications subject to change without notice.

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Rev. 12/09/13

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

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

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

REV:	DATE:	ISSUED FOR:

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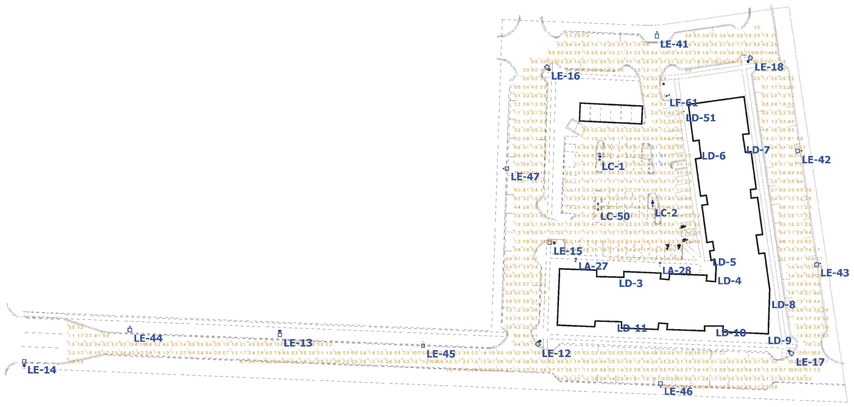
CLIENT NAME: HERMAN & KITTLE PROPERTIES, INC.

WATER STREET FLATS
SITE PLAN
DETAIL SHEET (BY OTHERS)

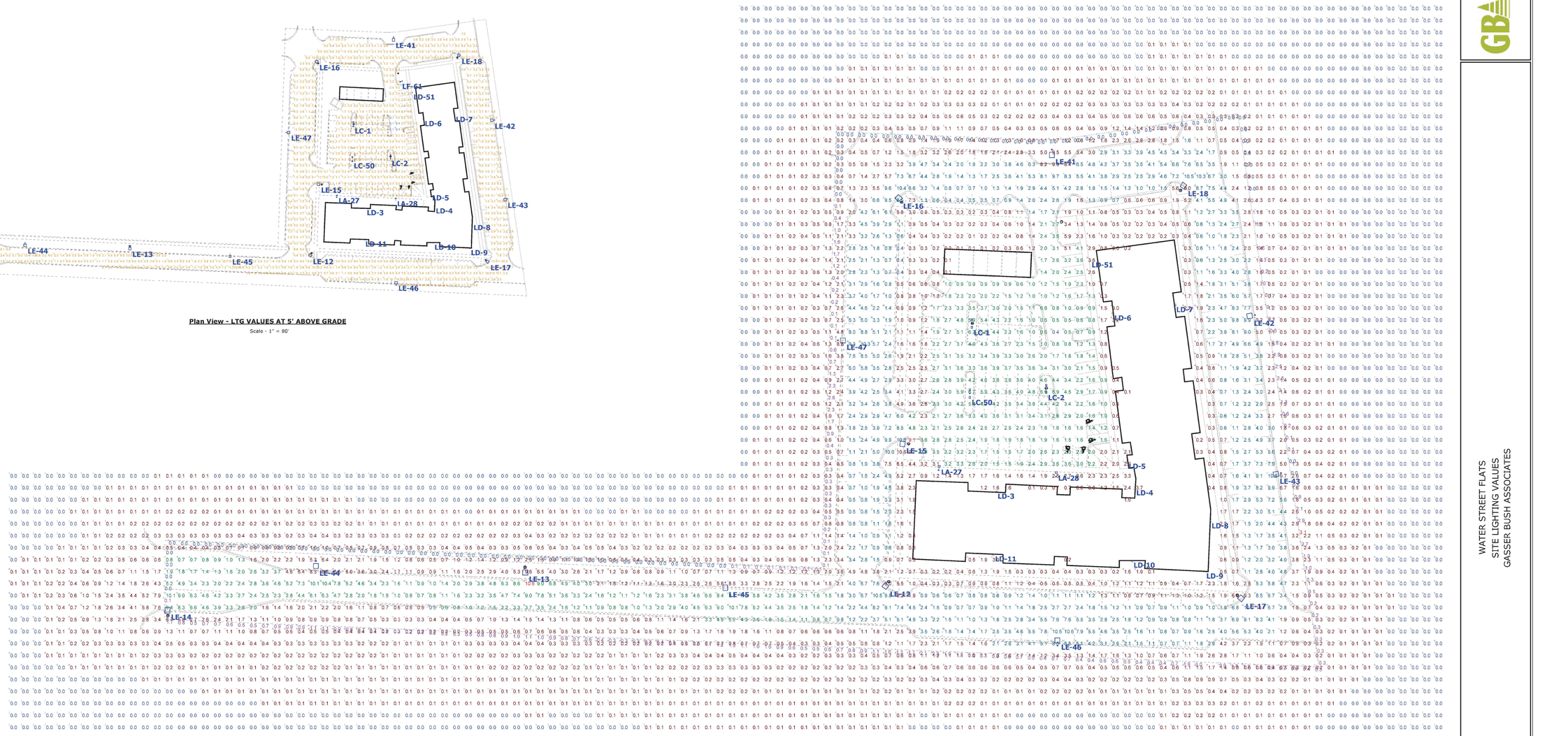
MCA JOB #:	1051–15–6832
DATE:	02–18–2015
DRAWN BY:	CMB
CHECK BY:	DLG
BOOK/CREW:	
ADDRESS:	
SECTION:	
TOWNSHIP:	
RANGE:	
COMMUNITY:	CITY OF YPSILANTI
COUNTY:	WASHTENAW
SHEET:	07

k:\2015\1051 job folders\1051-15-6832\Drawings\plan sets\site plan\6832-SP-DT.dwg; 2/18/2015 2:27 PM; rlake



Plan View - LTG VALUES AT 5' ABOVE GRADE

Scale - 1" = 80'



Plan View

Scale - 1" = 40'

Luminaire Locations

		Location				
No.	Label	X	Y	MH	Orientation	Tilt
1	LC	6545.10	6776.50	15.00	0.00	0.00
2	LC	6607.16	6722.20	15.00	0.00	0.00
3	LD	6565.53	6636.33	15.00	0.00	0.00
4	LD	6681.27	6639.13	15.00	270.00	0.00
5	LD	6675.07	6661.20	15.00	270.00	0.00
6	LD	6662.96	6785.00	15.00	270.00	0.00
7	LD	6714.66	6791.96	15.00	90.00	0.00
8	LD	6744.25	6811.53	15.00	90.00	0.00
9	LD	6739.74	6569.67	15.00	180.00	0.00
10	LD	6679.02	6578.69	15.00	180.00	0.00
11	LD	6563.34	6583.90	15.00	180.00	0.00
12	LE	6475.69	6560.76	28.00	220.19	0.00
13	LE	6172.44	6573.31	28.00	180.00	0.00
14	LE	5873.44	6532.95	28.00	0.00	0.00
15	LE	6491.44	6875.83	28.00	274.65	0.00
16	LE	6486.75	6878.09	28.00	316.36	0.00
17	LE	6766.52	6550.04	28.00	130.54	0.00
18	LE	6719.41	6887.86	28.00	31.52	0.00
27	LA	6517.42	6654.15	15.00	4.50	0.00
28	LA	6615.35	6649.02	15.00	4.50	0.00
41	LE	6611.89	6921.76	28.00	180.00	0.00
42	LF	6781.36	6783.85	28.00	258.42	0.00
43	LE	5803.05	6651.88	28.00	258.42	0.00
44	LE	5997.34	6578.49	28.00	180.00	0.00
45	LE	6339.17	6560.49	28.00	180.00	0.00
46	LE	6616.61	6507.78	28.00	0.00	0.00
47	LE	6433.01	6762.62	28.00	90.00	0.00
50	LC	6543.36	6718.23	15.00	0.00	0.00
	LC-1	6543.36	6721.26	15.00	0.00	0.00
	LC-2	6543.36	6715.20	15.00	180.00	0.00
51	LD	6644.04	6829.45	15.00	260.47	0.00
61	LF	6627.23	6848.55	15.00	254.54	0.00

Luminaire Schedule

Symbol	Label	Quantity	Manufacturer	Description	Catalog Number	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	LA	2	Lithonia Lighting	DSXO LED WITH (2) 20 LED LIGHT ENGINE, TYPE T3H OPTIC, 4000K, @ 700mA WITH HOUSE SIDE SHIELD	DSXO LED 40C 700 40K T3H MVOLT HS	LED	1	DSXO_LED_40C_700_40K_T3H_MVOLT_HS.ies	6719.141	0.9	91
	LC	3	Lithonia Lighting	DSXO LED WITH (2) 20 LED LIGHT ENGINE, TYPE T3H OPTIC, 4000K, @ 700mA	DSXO LED 40C 700 40K T3H MVOLT	LED	1	DSXO_LED_40C_700_40K_T3H_MVOLT.ies	9075.461	0.9	182
	LD	10	Lithonia Lighting	WST LED WITH 1 MODULE, 20 LED's, 700mA DRIVER, 4000K COLOR TEMPERATURE, TYPE 4 LENS	WST LED 2 10A700/40K SR4 MVOLT	LED	1	WST_LED_2_10A700_40K_SR4_MVOLT.ies	3838.514	0.9	47
	LE	14	Holophane	Mongoose LED with 8 COBs, 4000K Color Temperature , 1050mA Drive Current , Type M Lens (Medium), Low Tilt	MGLED 8 4K AX M L X	LED	1	MGLED_8_4K_AX_M_L_X_Ios	32104.68	0.9	326
	LF	1	Lithonia Lighting	DSXO LED WITH (2) 20 LED LIGHT ENGINE, TYPE T4H OPTIC, 4000K, @ 700mA	DSXO LED 40C 700 40K T4H MVOLT	LED	1	DSXO_LED_40C_700_40K_T4H_MVOLT.ies	9028.783	0.9	91

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DRIVE	X	3.5 fc	10.6 fc	0.5 fc	21.2:1	7.0:1
LTG VALUES AT 5'ABOVE GRADE	+	3.3 fc	16.4 fc	0.1 fc	164.0:1	33.0:1
OVERALL LTG VALUES AT GRADE	+	1.0 fc	10.7 fc	0.0 fc	N/A	N/A
PERIMETER PARKING AREA	X	3.4 fc	10.7 fc	0.4 fc	26.8:1	8.5:1
PROPERTY LINE	+	0.3 fc	3.1 fc	0.0 fc	N/A	N/A
SMALL PARKING LOT	X	2.6 fc	9.1 fc	0.4 fc	22.8:1	6.5:1

Note

1. SEE MH COLUMN OF LUMINAIRE LOCATIONS FOR MOUNTING HEIGHTS.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTORS.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT GRADE.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP. GBA DOES NOT ACT AS THE CIVIL OR STRUCTURAL ENGINEER AND DOES NOT DETERMINE BASE REQUIREMENTS. POLES SPECIFICATIONS ARE NOT INCLUDED WITH EXTERIOR LIGHTING PHOTOMETRIC ANALYSIS. THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

WATER STREET FLATS
SITE LIGHTING VALUES
GASSER BUSH ASSOCIATES

Designer
KJS
Date
2/13/2015
Scale
Not to Scale
Drawing No.
#15-35535-V3
1 of 1

1 / A.201 SOUTH ELEVATION
SCALE: 1" = 20'

HERMAN & KITTLE PROPERTIES, INC.
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SEAL

NOT FOR CONSTRUCTION

PROJECT TITLE

WATER STREET FLATS
RIVER ST. & SOUTH ST.
YPSILANTI, MI
WASHTENAW COUNTY

SHEET TITLE

BUILDING ELEVATION

ISSUED FOR:	DATE
APPLICATION DRAWINGS	4-1-2014

REVISIONS

MARK	DESCRIPTION	DATE
	ADDENDUM NO.	DATE

JOB NO.
13-036

SHEET NUMBER
A.201

2 A.202 EAST ELEVATION
SCALE: 1" = 20'

1 A.202 WEST ELEVATION
SCALE: 1" = 20'

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SHEET TITLE

BUILDING ELEVATIONS

ISSUED FOR:	DATE
APPLICATION DRAWINGS	4-1-2014

REVISIONS

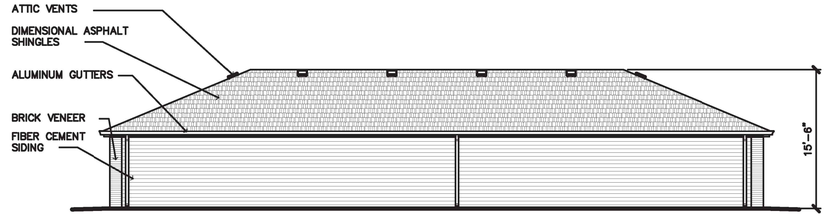
MARK	DESCRIPTION	DATE
1	ADDENDUM NO.	DATE

JOB NO.

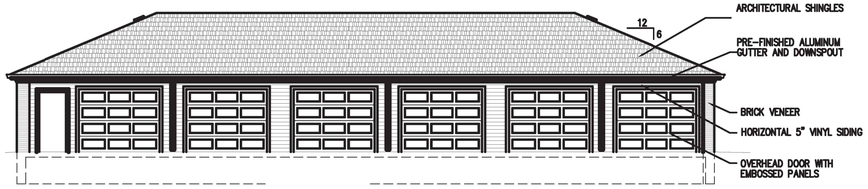
13-036

SHEET NUMBER

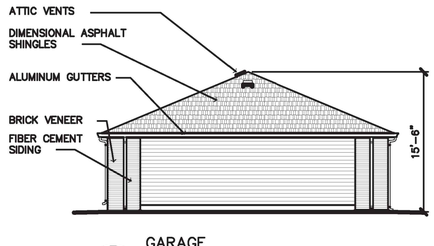
A.202



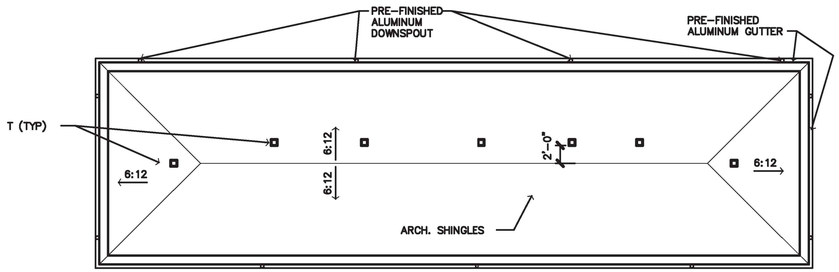
4 ASP.3 GARAGE REAR ELEVATION
SCALE: 1/16" = 1'-0"



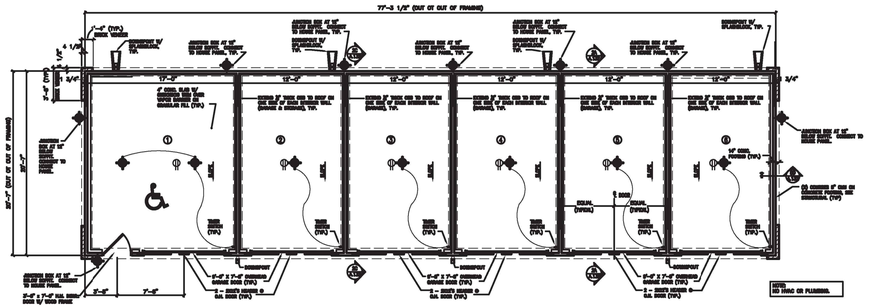
3 ASP.3 6-BAY W/ ADA STALL GARAGE PLAN
SCALE: 1/16" = 1'-0"



5 ASP.3 GARAGE SIDE ELEVATION
SCALE: 1/16" = 1'-0"



2 ASP.3 6-BAY W/ ADA STALL GARAGE PLAN
SCALE: 1/16" = 1'-0"



1 ASP.3 6-BAY W/ ADA STALL GARAGE PLAN
SCALE: 1/16" = 1'-0"

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WASHTENAW COUNTY

SHEET TITLE

GARAGE PLANS

ISSUED FOR:	DATE
APPLICATION DRAWINGS	4-

REVISIONS

MARK	DESCRIPTION	DAT
1	ADDENDUM NO.	DAT

JOB NO.

13-036

SHEET NUMBER

ASP.3