

Development Services

Planning Division

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Application Checklist

SITE PLAN

At time of application, you will be required to provide the following:

1. A letter of intent describing the project, identifying the project contact person(s), and any other information relevant for staff's review.
2. A PDF of the site plan(s) illustrating all buildings and property boundaries for assignment of addresses. Additionally, a floor-by-floor suite layout plan for commercial or dwelling unit layout plan for multi-family residential shall be provided for assignment of suite numbers
3. A PDF illustrating fire engine turn radius drawn at 20 or 30 feet scale (as applicable).
4. A PDF of colored elevations for all sides of proposed buildings and/or structures which illustrate architecture, materials, and color palette. The elevation drawings should be at such a size as to appropriately show architectural detail. The applicant shall also have a materials board available upon staff's request.
5. A PDF of the photometric plan, manufacturer cut sheets and/or light fixture details for all exterior light fixtures.
6. A PDF of the Storm Water Management Plan.
7. A PDF of the Storm Water Pollution Prevention Plan, separate from site plan set.

Your Site Plan shall include at least the following:

Cover page

1. Title of the project
2. City Case Number (provided with first comment letter)
3. Legal description including total area of the property.
4. Date, compass point, legend of symbols, scale (written and graphic).
5. Vicinity map that accurately represents the area including recent developments.
6. Address(es), if assigned.
7. Name, address and contact information of owner(s) of subject property.
8. Name, address and contact information of applicant.
9. Name, address and contact information of design professional.
10. Notation of existing Comprehensive Plan land use designation.
11. Notation of existing Zoning District or if a Planned Unit Development (PUD) the name of the PUD and underlying zoning.
12. Map Glossary, if applicable (map may be a separate sheet if necessary).
13. Notation of the number of parking spaces required by Code and number provided, including formulas used to calculate requirements.
14. Calculations of the amount of paved and/or impervious surfaces both existing and proposed shown in both square footage and percentage of the total site.
15. Total square feet of all building floors, individually and collectively separated by existing and proposed.
17. Total number of dwelling units Notation of proposed site and/or building use(s).
18. Notation of required open space and calculations of the amount provided shown in both square footage and percentage of total site.
18. Notation of required buffers and calculation of vegetation requirements.

19. Notation of two City of West Des Moines benchmarks. The City's horizontal and vertical control network can be found at <https://www.wdm.iowa.gov/government/engineering-services/links-documents>

Dimension Page

20. Property boundary lines, dimensioned.
21. Location, footprint, size and use of all buildings, structures, and enclosures, existing and proposed, and required setback lines shown and dimensioned.
22. Building setback lines.
23. Existing easements and/or deeds for rights-of-way, overhead utilities, buffers, railroads, drainage courses, public utilities, etc. with book and page number from where the easements are recorded with the respective county. Note width.
24. Proposed easements and/or rights-of-way, overhead utilities, buffers, railroads, drainage courses, public utilities, etc. with book and page number from where the easements are recorded with the respective county. Note width.
25. Street names noting whether public or private, pavement width, half right-of-way widths dimensioned from centerline of right-of-way, full right-of-way width dimension should be shown for all existing and propose roads, alleys, streets or highway on or adjoining the subject property.
26. Location of parking areas, parking lot setbacks, parking islands, end caps, loading zones, access drives, sidewalks, and trails.
27. Identification of the type of surfacing, curbing, etc. used for parking areas, drives, sidewalks and trails. Identify areas of no curbing and any proposed traffic safety features for the site.
28. Location of all existing streetlights.
29. Location of trash enclosures or generator enclosures.
30. Location and width of buffers, if required.
31. Location of two points of access (separated by a distance equal to $\frac{1}{2}$ the crosswise dimension of the site) to be maintained during construction and after construction.
32. Fire lanes or bypass lanes, if application, shown and dimensioned (at least 24 feet is width or fire lanes and 20 feet for bypass lanes.).
33. Location of walls, fences, materials storage (if applicable), outdoor display (if applicable), and location of other similar features.
34. Location of monument signage. Signage is not approved with the site plan, but the location will be reviewed for placement and conflicts with easements, utilities, etc.
35. If canopies are part of the building design, canopies must have a vertical clearance of 14 feet.
36. Indicate any proposed right-of-way. Include dimension from existing right-of-way and street centerline.
37. Location of any existing driveways on the opposite side of the street adjacent to the site.

Grading Page

38. Existing and proposed topography of subject property at contour intervals of not more than two (2) feet, City datum.
39. Existing topography and site features of adjacent properties for at least one hundred (100) feet outside of subject boundary, at contour intervals of not more than two (2) feet, City datum.
40. Identification of existing and proposed drainage-ways, detention areas, and applicable engineer's calculations. Label as private detention facility. Label 100-year pool elevation. Show overflow path. Label outlet restriction type, size, and location and provide a detail of said restriction.

41. Typical cross section detail for swales and major drainage ways. The detail should show a maximum slope of 1-unit vertical in 3 units horizontal for the 10-15 feet of any detention ponds, lakes, water landscape features, etc. or provide details for fencing of these areas.
42. Identification of any structures (i.e. retaining walls) necessary to achieve the stated grades. Provide engineering specifications and calculations.
43. Typical cross-section of right-of-way for any grading within the right-of-way.
44. Identification and location of all established floodway, floodway fringe, and flood plain overlay lines, if applicable. Provide flood plain elevation based on the new Flood Insurance Rate Map (FIRM) with the most recent FEMA information.
45. All lots with overland flowage easements shall have a minimum opening elevation (MOE) corresponding to the elevation of the overland flowage easement. Notation of minimum finished floor elevations (FFE) or minimum opening elevations for all lots where conditions warrant additional protection from possible flooding situations. If conditions are such that the FFE is not needed, the surveyor shall include a statement which documents such. Lots with overland flowage easements located in the side yard (parallel to the side yard property line) shall also have an elevation established at mid-point between the front and rear property lines, and there shall be a corresponding minimum protected opening elevation for the structure.
46. Provide a grade elevation for overland flowage easements at all points where the easement crosses a property line, including where the easement runs to the street or crosses the rear property line.
47. Provide a cross section detail showing a maximum slope of 1 unit vertical in 3 units horizontal for the first 10-15 feet of any detention ponds, lakes, water landscape features, etc., or provide details for fencing.
48. Show existing and proposed storm sewers.
49. Provide overflow route if an adjacent public street is in a sump condition. Said overflow shall be clearly labeled on the plan and a typical detail provided showing how the overflow is to be constructed.

Utility Page

50. Location of utilities with appurtenance information, labeled with depth, size, type, existing or proposed and whether public or private. Public utility information is available on the City's website at www.wdm.iowa.gov/residents/maps-gis/interactive-gis. For water utility information contact the West Des Moines Water Works Engineering Project Manager to confirm water main location prior to submittal (515-222-3510). For private infrastructure (cable, electric, fiber, gas, phone, private water, etc.) utilize the Iowa One Call Design Request System at www.iowaonecall.com.
51. Locations of existing and proposed easements for right-of-way, overhead utilities, drainage courses, utilities, etc. shall be shown and appropriately labeled with reserve width, type, and whether public or private.
52. Location and elevation of service connections to public storm and sanitary sewers.
53. The following water utility information:
 - a. quantities list of water main and appurtenances, minimum water main size is eight inches (larger sizes may be required), mains and valves (allowing one unvalved pipe) are located on south or west sides of the streets, mains to be located no closer than four feet to the curb line,
 - b. valves to be equally spaced between intersections at no more than 800 feet apart, valves should not be located in sidewalks or driveway locations.
 - c. Show water service to the building. Service lines shall have a curb valve (shut off) located six feet from the property line, in the right-of-way, not in a sidewalk.

- d. Dead ends are to be eliminated whenever possible.
- e. Fire lines and domestic service lines shall have separate shut off valves located ten feet from the building. The domestic line can be tapped into the fire service line and shall have a shut-off adjacent to the fire line shut-off.
- f. Fire hydrants: is required at every intersection, installed at the entrance to and end of cul-de-sacs and intermediate hydrants greater than 500 feet, for other streets the intermediate fire hydrants shall be provided at 450 feet spacing. Fire hydrants are placed at high points or low points whenever possible, are located on the projection of property lines, a blow off hydrant shall be installed on all temporary dead ends. One private hydrant will be located within 100 feet of the fire department connection in addition to municipal hydrants on the public streets. Other hydrants must meet Appendix C of the International Fire Code for number and disbursement around the building site.
- g. Fire department sprinkler connection shall be placed on a readily accessible side to the building with a drive aisle running alongside of the building. Strobe lighting will be installed with the connection tied to the fire alarm.

Landscape Page

- 54. Notation of required and proposed open space square footage in both square feet and percent of site.
- 55. Notation of required number and type of landscape plantings and calculation of the quantity and types proposed for open space calculations. Include schedule of plant material with common name, scientific name, size and number. If existing landscaping will be used towards calculations location and plant type must be identified.
- 56. Notation of buffer landscape calculations including required materials and proposed materials. Include schedule of plant materials with common name, scientific name, size and number. These calculations and schedules need to be separate from the open space calculations and schedule. A master schedule may also be included.
- 57. Plan of location and notation of landscape materials. No over-story trees are allowed in utility easements.
- 58. Location and screening methods for ground mounted mechanical equipment or building mounted mechanical equipment (condensers, meters, outside building mounted utility runs, etc.).
- 59. Location and screening methods for trash or generator enclosures.
- 60. Location of all existing trees. Indicate those trees to be preserved and include illustration and details of preservation methods to be used.
- 61. Identification of all other site development and landscape features (i.e., detention areas or ponds, walkways, vegetation).
- 62. A minimum of five feet of clearance must be maintained around the fire department connection and the private fire hydrant. Landscaping provided within the five feet must be a ground cover variety and not grow more than 15 inches high.
- 63. Show all existing and proposed public easements.

Details

- 64. Detail of all intersecting corners of street and access drives, including labels with appropriate radius in accordance with West Des Moines design standards.
- 65. Specific construction detail for all exterior stairways or steps, including rise & run, handrails, handrail extensions, and guardrails; or confirm that there are no steps or stairs.
- 66. Specific construction detail for all exterior ramps and sidewalks, including slopes, curb cuts, slip resistant surfaces and elevations.

67. Specific handrail detail for ramps and sidewalks or confirm in writing that all sidewalk slopes are less than 1 unit vertical in 20 units horizontal. Steps are an acceptable alternative, if not part of the accessible route.
68. Provide engineering drawings for any retaining walls which exceed 4 feet in height, or confirm in writing that any retaining walls needed for the site will not exceed 4 feet in height.
69. Provide a guardrail detail for retaining walls that are 30" or more above grade, or confirm in writing that the walls are less than 30" above grade.
70. Provide a cross-section detail showing a maximum slope of 1 unit vertical in 3 units horizontal for the first 10-15 feet of any detention ponds, lakes, water landscape features, etc. or provide details for fencing.
71. Provide details for all sidewalk ramps constructed within the public right-of-way. Certified as-builts showing conformance with PROWAG must be provided prior to final occupancy.

Notes (in addition to standard contractor notes)

72. "The General Contractor shall be responsible for the coordination of work of all subcontractor(s) involved in the project."
73. "An on-site inspection shall be requested with the Building Division at (515) 222-3630, prior to placement of any concrete ramps."
74. "All water work, public or private, shall be done in accordance with West Des Moines Water Works Standard Specifications."
75. "Contractor shall notify West Des Moines Water Works at least one week prior to building construction."
76. "The General Contractor shall be responsible for compliance with the West Des Moines Water Works and the City's Cross Connection Control/Containment Provision"
77. "Any water use from a hydrant, public or private, requires the use of a West Des Moines Water Works hydrant meter. Call 515-222-3465 to reserve a meter."
78. "Contact Building Inspection (515-222-3630) a minimum of 24 hours in advance for private utility installation inspections."
79. "The General Contractor shall be responsible for the proper installation of an approved Backflow Prevention Assembly(ies) for containment in all new construction. Backflow prevention to be installed per City Ordinance 1297, 54-1998. Contractor shall notify West Des Moines Water Works (515-222-3465) a minimum of 24 hours after installation and testing of all backflow devices to schedule final inspection."
80. "All lights are to be downcast cutoff variety. Wall packs are prohibited. The maximum illumination allowed at the property line is 1 foot-candle or less.
81. All construction within public R.O.W./easements, and/or any connection to public sewers and streets, shall comply with the West Des Moines Standard Construction Specifications for Subdivisions, DSM Metro Design Standards and WDM Addendums.
82. At least one week prior to any construction within public R.O.W./easements and/or any connection to public sewers and streets, the Contractor shall contact the WDM Engineering Services 222-3475 to schedule any required inspections. It is important to note City approval of this plan is subject to the Applicant obtaining all necessary easements/agreements and applicable permits.
83. If additional pavement removal is required other than a standard box out, full panel removal will be required. No half panel removal will be allowed.
84. Coordinate staging and traffic control with WDM emergency services.
85. Lane closure notices must be submitted to West Des Moines Public Services for approval a minimum of 48 hours in advance of closure.
86. All connections to public sewers shall be core drilled.

Architecture Requirements

87. Straight-on black and white elevations for all sides of proposed buildings and/or structures which illustrate architecture, materials (with item code and manufacturer information), and color palette (with item code and manufacturer information). The elevation drawings should be at such a size as to appropriately show architectural detail and overall building heights. No perspective drawings are necessary.
88. Color elevations or perspectives for all sides of the proposed buildings and/or structure. Materials samples are not necessary unless color elevations do not render the materials accurately.
89. Simple floor plan(s) for proposed buildings and/or structures indicating the proposed general use of all areas of the building. If a floor plan is the same for multiple floors of a building, one representative plan can be provided with the applicable floors noted
90. Location of any roof mounted HVAC, vents or exhaust equipment on a roof plan and “ghosted” in on building elevations with screening details for all equipment. Screening options may include raised parapets, screening walls, penthouse elements, or other acceptable solutions.
91. Location on the site and detail of trash enclosures, including architectural elevations noting materials to be used with color information. Trash enclosure materials and colors need to be compatible with principal building materials and colors. Note: Architectural plans that are submitted for Building division plan review are not distributed to the Planning division. If enclosure details are provided only in the architectural set, please also provide applicable sheets as part of the planning application.
92. Location and manufacturers cut sheet of any exterior light fixtures for the building and site.
93. Location, exterior elevations and material details for any accessory buildings and/or structures, including but not limited to, patios, decks, sheds, clubhouses, gazebos, shade structures, canopies, and awnings.
94. Location and details for any proposed retaining walls or fences on the site indicating the material(s) and color proposed.
95. Location and screening details for loading areas and undesirable building elements, such as but not limited to, transformers, HVAC equipment, electrical equipment, and meters.

Other Information:

96. A Flood Plain Development Application shall be submitted for review prior to any development work in the flood plain including, but not limited to, buildings or other structures, mining, filling, grading, paving, excavating, or drilling operations. An Elevation Certificate may be required as part of the application (use FEMA authorization form).
97. Acknowledge in writing that the project civil engineer or design professional shall provide as-built documentation that the storm water drainage system has been constructed as designed. The as-built shall be forwarded to the City before issuance of the final occupancy permit, and shall include elevations, volumes, detention and retention pond capacity, piping restrictors, and any pertinent aspects of the storm water system.
98. Acknowledge in writing that the following information has been forwarded to the building architect prior to site plan approval and building plan submittal: The proposed project exceeds 3,000 square feet and will be required to provide vestibules for entrance as required by the State adopted International Energy Conservation Code (Section 502.4.7). For follow-up questions contact Building Inspection at 515-222-3630.
99. Confirm in writing that all accessible parking spaces are located on the shortest possible accessible circulation route to the main entrance of the building.

100. Confirm in writing that there are at least two (2) accessible means of egress with a continuous exit path away from the building for tenants that will require two exits. The continuous path may include landings, ramps, handrails, guards, etc., specifically from a rear or secondary exit.
101. If an underground parking structure is incorporated, acknowledge in writing that at least one exit from the parking structure will meet accessibility requirements for emergency exiting, by providing a maximum slope of 1 unit vertical in 12 units horizontal for the vehicle ramp, an area of refuge, or by similar means.
102. If applicable, provide Iowa DNR/U.S. Army Corps of Engineers Section 404 Authorization.
103. If disturbing 1 acre or more provide a copy of the Iowa DNR General Permit No. 2 authorization and a stormwater pollution prevention plan (SWPPP) conforming to the requirements of General Permit No. 2.
104. Provide a stormwater management plan (SWMP) in accordance with current SWMP guidelines.
105. For security concerns, keep in mind the followings: maintain tree canopies at least 8 ft. above the ground; keep shrubs trimmed to less than 3 ft. except where privacy or environmental noise mitigation is a primary concern; grade land where practical without substantially altering the natural terrain to provide unobstructed sight lines within the project and from adjacent streets and developed areas; use open landscaping and see-through fences instead of solid walls or hedges for boundaries where privacy or environmental noise mitigation is not needed; orient buildings in a complex for good visibility of the streets, parking lots, and other buildings in the complex; orient parking spaces to provide good visibility between cars; orient houses in a neighborhood for clear visibility of the streets and the sides of nearby houses; use open or see-through structures for exterior stairways, walkways, porches, sitting areas, patios, parking spaces, etc.; use open structures for interior walls; in parking structures and garages; eliminate possible hiding or entrapment spots along pedestrian paths.

For Medium Density or High Density Residential Plans:

1. In order to determine if accessibility provisions apply, provide description regarding whether the town home units are slab on grade, one story with basement, two story, etc.
2. Confirm that the lots with designated detention easements and overland flowage easements will still have at least 20' of usable rear yard behind the residence, which is not part of the easement and will not be rendered unusable during seasons when the detention and flowage is being utilized. The 20' shall be measured from any deck, seasonal porch, or similar, to the easement.
3. On the residential lots, the setback for attached garages shall be a minimum of 20 feet, which will allow for a vehicle to be parked in front of the garage without encroaching on the sidewalk or public right-of-way. This issue shall be addressed on the final plat and/or specific plan with an additional setback line, or individual site layouts for each lot that clearly show garage location.
4. Private sanitary sewer lift stations(s) shall require a DNR permit and an approved copy shall be provided to the City. Lift stations shall be designed by a professional engineer; and be designed, constructed, operated and maintained in accordance with the DNR Design Standards and permit requirements. Upon completion of the installation, the professional engineer of record will be required to provide certification to the City (submit to Chief Building Official) that the lift station was constructed in accordance with the DNR approved construction plans. Said confirmation shall be submitted before the approval and release of a final plat of any parcel utilizing said lift station.

6. Provide a detail confirming that all foundations supporting wood shall extend at least 6 inches above adjacent grade and the clearance between any siding material and the sod shall be a minimum of 6 inches.
7. Provide a detail confirming that the grade immediately adjacent to the foundation shall be sloped away from the building no less than 1 unit vertical to 12 units horizontal for a minimum of 6 feet measured perpendicular to the foundation.