Residential Site Plan

Submittal Requirements

Town of Oro Valley
Community and Economic Development Department - Planning Division
Questions: 520.229.4800 | orovalleyaz.gov

Plan Format

1. Plans must be drawn to a scale of one-inch equals forty feet (1" = 40'). Scale to be the same for all sheets. Different sheet size or scale must be pre-approved by the Town Engineer and Planning Division Manager.
2. Plans must include a page border, 1/16" (0.0625 inches) width, with one-half (1/2") inch margins on the top, bottom and right-hand sides of the page; and a two (2") inch margin on the left-hand side of the page.
3. Margins are to only contain the name of the project in the lower right-hand corner below the Title Block.
4. All lettering and dimensions must be the equivalent of twelve (0.12") point font or greater in size.
5. In the lower right corner of each sheet, provide a Title Block which includes:
    A. Type of Plan (i.e., Conceptual Site Plan)
    B. Name of development
    C. "Lots ___ through ___ and Common Areas A through_____", if applicable.
    D. Brief legal description, i.e., "Portion of Section_____, T _____S, R_____E, G&SRB&M, Town of Oro Valley, Pima County, Arizona
    E. Scale
    F. Contour interval
    G. Date (revised plans must show date of revision)
    H. Town of Oro Valley case number for this plan
    I. Sheet ____ of ____ (total pages)
6. Reference related Case Numbers (e.g., general plan amendments, rezoning, variance) adjacent to the title block on each sheet.
7. Each sheet must bear the seal, signature, and registration expiration of the registered professional who prepared the plan in the lower right-hand corner near the title block.
8. Show north arrow and scale bar towards the top of each page that include the site layout. Every effort must be made to have north oriented toward the top of the sheet. Some slight rotation may be made to accommodate long narrow parcels, convenient match lines, etc., but in no case will the north arrow point downward without pre-approval.
9. If the plan consists of more than one (1) sheet, a small index drawing of the site showing the area represented on each sheet must be placed on the right side of each sheet.
10. If the firm name, address and phone number of the registrant who prepared the plan is to be listed on every sheet, then it must be in the lower right-hand corner of the page immediately next to the Title Block.

All Sheets

1. Town limits must be shown on or immediately adjacent to the project site, where applicable.
2. Indicate graphically, where possible, compliance with conditions of any General Plan amendment, rezoning, Conditional Use Permit (CUP), annexation, or variance conditions.
3. All existing zoning classifications on and adjacent to the project (including across any adjacent right-of-way) must be indicated on all site layout drawings with zoning boundaries clearly defined. Include subdivision name, recording information, lot lines and lot numbers.
4. Addressing:
    A. Provide interior street names, if applicable
    B. All naming and signage of streets shall conform to Pima County's Addressing Ordinance and Policies
5. Ensure all line types are different and clearly indicated.
6. The development exterior site property boundary line must be delineated with a solid BOLD line, which must be the boldest line on the plan.
7. If more than one zone applies, show the zoning boundary line on the plan.
8. If the proposed development must be depicted on more than one plan sheet due to scale, adequate match lines must be provided "See sheet (insert #)" on edges of the plan where an abutting sheet depicts more information.

Conceptual Site Plan

A. Cover Sheet

1. The following is to be centered at the top of the cover sheet in bold lettering with a font of forty (0.40") point or greater:
    A. Conceptual Site Plan
    B. Project Name
    C. Oro Valley Case Number
2. A site plan of the entire project (scale to vary to accommodate placement on the cover sheet) is to be centered, toward the top of the page directly below the information listed above; and is to include at a minimum, the following:
    A. North arrow
    B. Lot lines
    C. Sheet cuts
    D. Circulation
3. Each section of the plan (e.g., Site Plan, General Notes, Location Map, etc.) must be Titled and labeled in a font no less than fourteen (0.14") point.
4. If the project is located within the boundaries of a Planned Area Development (PAD), include a reduced-scale map of the PAD District on the right-hand side of the cover sheet, indicating the location of the portion being developed.
5. A legend which depicts and describes all symbols used in the document.
6. List the following on the cover sheet:
    A. The name, mailing and email addresses, and phone number of:
        i. The primary property owner of the site
        ii. The developer of the project,
        iii. The registrant(s), and other person(s), firm(s), or organization(s) that prepared the development package documents must be provided.
    B. The Arizona registrant responsible for preparing the conceptual site plan must seal all drawings and supporting documents in accordance with Arizona Board of Technical Registration guidelines
7. Location Map
    A. A small project location map must be drawn in the upper right-hand corner with north oriented to the top of the sheet. The map must cover approximately one (1) square mile, be drawn at a scale of 3" = 1 mile, and provide the following information:
    B. The subject property identified and centered within a one square mile area
    C. Any adjacent conditions (e.g., subdivisions, non-residential development, un-subdivided land, schools, existing zoning, major streets, rivers, railroads, National Forests and city, town or other jurisdictional limits).
    D. The section, township and range of the subject development
    E. Labeled section corners
    F. A north arrow and scale

8. The following General Notes shall be provided on the cover sheet:
    A. Gross area of the development in acres.
    B. Gross density.
    C. Total miles of new public streets.
    D. Total miles of new private streets.
    E. List all annexation, General Plan amendment, rezoning, conditional use permit, or site plan conditions, zoning variances or other modifications applicable to the project. Reference associated case numbers. If there are none, add a statement that there are no conditions, variances, or other modifications applicable to the project.
    F. Assurances for water service, site stabilization and landscaping must be posted prior to the issuance of grading permits.
    G. Add the following Planning General Notes:
        i. Existing Zoning is
        ii. Provide the maximum building height allowed
        iii. If one (1) or more of the following special overlay zones are applicable to the property, add a note stating that the project is designed to meet the specific overlay zone(s) criteria. The note must specify which lots are affected by the overlay zones if there is more than one (1) lot within the site. The zones include the following:
            1. Tangerine Corridor Overlay District (TRCOD)
            2. Oracle Road Scenic Corridor District (ORSCD)
            3. Riparian Habitat Protection Overlay District
            4. Airport Environs Zone
            5. Hillside Development Zone (HDZ)
            6. Golf Course Overlay Zone
        iv. If applicable, indicate whether the project meets the criteria outlined in Section 27.10, Environmentally Sensitive Lands (ESL), of the Oro Valley Zoning Code Revised (OVZCR) and provide a note identifying all impacted lots and a statement that the project is designed to comply with the regulation.
        v. If applicable, indicate whether the project will be developed in phases. Clearly define what each phase of development includes.
        vi. The following categories and figures must be provided:
            1. Total amount of open space required and provided
            2. Total amount of landscaped common areas
        vii. Landscaped buffer yards appropriately labeled per OVZCR Table 27.7. Indicate type of buffer yard (A, B, or C) and location
        viii. Provide the required perimeter or building setbacks, whichever is applicable
        ix. Include the required parking provisions (spaces per lot and any additional parking)

x. For areas designated as common space or open space, specifically indicate ownership, purpose, restrictions, and maintenance responsibilities.
xi. Add the following statement: All signage and lighting to be addressed as part of a separate review and approval process

H. Add the following Engineering notes:
   i. Indicate the design speed and design vehicle to be used in street design.
   ii. All new public roads within and adjacent to this project will be constructed in accordance with approved plans. Separate public improvement and construction plans will be submitted to the Town Engineer's office for review and approval.
   iii. Any relocation or modification of existing utilities and/or public improvements necessitated by the proposed development will be at no expense to the public.

I. Indicate the water service provider. Please note, other water service providers may have general note requirements. If located within Oro Valley Water service area, add the following general notes:
   i. Oro Valley Water Utility will be the water service provider.
   ii. This development must comply with the Oro Valley Water Utility Specifications Manual during all phases of construction.
   iii. This project will be served by Oro Valley Water Utility which has been designated as having an assured 100-year water supply by the Director of Water Resources. Any and all wells must be abandoned per ADWR regulations.
   iv. A line extension agreement must be in place prior to any work on the water infrastructure for this project begins.

J. If applicable, add the following general note: Should an easement be in conflict with any proposed building location, vacation of the easement is to occur prior to issuance of building permits.

K. Add the following Golder Ranch Fire General Notes:
   i. Approved fire apparatus access roadways and fire hydrants connected to an approved water supply of 1500 GPM for fire protection must be installed and in service prior to combustible material delivery to the site. Temporary construction office trailers are considered combustible material.
   ii. Roadways shall be surfaced with an all-weather material capable of supporting an imposed load of 82,000 pounds.
   iii. Only if applicable (e.g., mixed-use developments): New commercial buildings shall be equipped with automatic fire sprinkler system.
   iv. Temporary street signs must be installed at each street intersection when construction of new roadways allows passage of vehicles. All structures under construction must be clearly identified with an approved address.

v. Electric gate operators shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

L. If applicable, add the following general notes:
   i. All trail easements indicated are for use by the general public as permanent, non-motorized trail easements or for private use by residents as permanent, non-motorized trail easements. Docket and applicable recordation information is included in the associated Final Plat.
   ii. Specify ownership and maintenance responsibility of all trails. Public trail easements must be dedicated to the Town as part of the Final Plat. Private trail easements must be dedicated to the HOA as part of the Final Plat (or prior to Final Site Plan approval if a plat is not required).
   iii. All public trails and associated signage must be constructed by the developer to Pima Regional Trail System Master Plan standards in consultation with the Town Parks and Recreation Department. The applicable design cross-section and locations are included within the landscape plan.
   iv. Trail and sign located, as indicated on this plan, must be verified by Town staff prior to construction and are subject to adjustment.
   v. Trails must be positioned in a manner to avoid vegetation and minimize potential for erosion.

M. The following codes and standards shall be applicable to this development:
   i. International Building Codes with Local Amendments
   ii. National Electrical Code
   iii. ADA Standards for Accessible Design
   iv. Golder Ranch Fire District Standards and Forms
   v. Town of Oro Valley Pool Code
   vi. PAG Standard Specifications and Details for Public Improvements
   vii. Town of Oro Valley Drainage Criteria Manual
   viii. Town of Oro Valley Subdivision Street Standards and Policies Manual
   ix. Town of Oro Valley Zoning Code, Current Revised
   x. Oro Valley Town Code, Current Revised

B. Existing Conditions Plan Sheet(s) - The following information must be shown on all plan sheets to indicate the existing conditions on the site and within one hundred (100) feet of the site. On sites bounded by a street, the existing conditions across the street will be provided to a minimum distance of 100 feet. Existing elements must be indicated in a different line weight than the proposed improvements and labeled or noted to be removed or retained.

1. Existing contours at 1-foot intervals labeled at a 5-foot index frequency. Two-foot or five-foot contours may be used in special cases. Extend contours 100 feet outside the property line.
2. Existing structures, including:

A. Existing Building footprint(s) with label height(s) Designate existing use(s) and indicate if vacant or currently being used.
B. Existing storm drainage facilities (e.g., detention basins, channels, dykes, dams) on and adjacent to the site
C. Existing traffic control and mitigation facilities and features such as signalization and signage
D. Existing fences, barriers, and walls
E. Any other miscellaneous structures such as awnings, ramadas, covered parking, etc., that would be present in an aerial photo or survey.

3. Other significant conditions on the site, such as major rock outcrops, ravines, hazardous topography, etc., on and adjacent to the site.
4. Identify any Environmentally Sensitive Lands (ESL) resources located on the site, if applicable.
5. Provide the following information for existing private or public streets, right-of way (ROW) adjacent to or within the site:
    A. Right-of-Way width
    B. Edge and limits of existing pavement and striping
    C. Street elements such as medians, curbs, sidewalks, and other relevant features
    D. Intersecting streets and driveways within one hundred and fifty (150) feet of the project property line or functional access, whichever is greater
    E. Street name
    F. Label street as public or private
    G. Traffic control and mitigation features such as signalization and signage
6. Conditions on adjacent land significantly affecting the design of the project such as character and location of adjacent development(s), residential subdivisions, dwellings, etc.
7. The following existing drainage information shall be identified on the concept site plan:
    A. Existing drainage ways, arroyos, washes, ditches, channels, flow and flood mitigation structures, etc., including their existing condition and functionality
    B. Delineate known flood prone areas
    C. Delineate local floodplains with a 100-year discharge greater than or equal to 50 cubic feet per second
    D. Delineate sheet flooding areas with 100-year flood depths greater than or equal to 12 inches
    E. Federally mapped FEMA floodplains and floodways
8. The following information regarding existing utilities must be provided:
    A. The location of water wells
    B. Water pumping plants
    C. Water reservoirs
    D. Indicate by note the direction, distance to, and sizes of water mains and sewer lines intended to service this project
    E. Show all existing TEP facilities within the development and surrounding property and indicate any possible conflicts with the proposed project.

F. Existing utility facilities such as yards, stations and appurtenances that would affect the proposed development
G. Existing utility easements

C. **Proposed Conditions Plan Sheet(s):** The following information on the proposed project must be shown on the drawing or added as notes. This shall include on and off-site elements required for the development.

1. All proposed features shall be delineated in a darker line weight than the existing site information.
2. If the project is to be phased, provide all necessary information (e.g., calculations, setbacks, interim drainage, temporary curbing, etc.) to indicate that each phase complies with all requirements as a separate entity. Show and label any temporary improvements that may be needed to make the site function for each phase as one entity.
3. All proposed lot lines. Metes and bounds property line information is not required on conceptual site plans. Proposed lot lines should be the thickest on the plan and differentiated from existing lot lines by line-type.
4. If the project has common areas, label each type of common area individually with a separate letter designation. Enclose with a solid line each area (e.g., Common Area A - private streets, Common Area B- Open Space, etc.).
5. Site Elements - Depict the following information:
    A. Proposed fences, barriers, and walls along the periphery of the project
    B. All other miscellaneous structures and/or parking associated with the common areas including refuse areas (for residential complexes).
    C. Locations and types of proposed monument or entryway signs (non-traffic related).
    D. Any significant saguaros with the required 10’ foot protection zones (if applicable).
6. Zoning Information – Provide the following information on the plan to indicate conformance with both the Town’s Zoning Code and/or any overriding PAD regulations:
    A. Graphically depict the building set-back from the property line, with dimensional control.
    B. Graphically depict the required buffer yard (s), with dimensional control.
    C. Delineate proposed natural open space areas
7. Site Circulation and Street Information:
    A. Show and label all right-of-way dedications on or abutting the site. If the conceptual site plan has been prepared in conjunction with a subdivision plat or is required as a condition of approval of a review process, such as a rezoning, street dedications in accordance with Oro Valley Town Code Section 7.9 may be required.
    B. Should there be any proposed street or alley vacation, provide this information. If vacation has occurred, include the recording information.
    C. If new streets are being created, whether public or private, they must be designed in accordance with Town of Oro Valley Subdivision and Streets

Standards. Indicate if streets are to remain private or are to be dedicated to the public. Provide the names of any proposed streets and include limits of street widths, curbs and sidewalks.

D. Proposed sidewalks along abutting right-of-way where required
E. Depict on-site pedestrian circulation through the common areas.
F. Depict all access roads and any proposed changes to the existing driveways.

9. Conceptual Grading – Provide schematic level concept grading information on the conceptual site plan. Said information shall consist of:
    A. Locations of graded features such as cut and fill slopes and retaining walls along the periphery of the project. Also identify the pitch of cut and fill slopes (e.g. 1:1, 2:1, 3:1, etc.)
    B. In lieu of spot elevations for general graded areas, proposed conceptual level contours may be provided instead
    C. The level of grading depicted on this plan should be schematic only and may be addressed with approximate proposed topography. Detailed checking of grade for such items as drainage and International Building Code (IBC) compliance will be verified at the Improvement Plan Stage in the permit process
10. Conceptual Drainage - The following minimum proposed drainage and floodplain information must be delineated on every conceptual site plan:
    A. Proposed drainage and erosion mitigation features/structures (e.g. detention basins, culverts, channels, major catch basins and storm sewers)
    B. Graphically identify any proposed changes to existing floodplain(s)
11. Conceptual Traffic – At a minimum, the following proposed traffic control and mitigation information must be delineated on every conceptual site plan:
    A. Delineate any proposed or modified signalization that corresponds to the traffic statement
    B. Delineate proposed off-site road improvements that correspond to the traffic statement

Final Site Plan

In addition to the conceptual site plan items, the following is required on a final site plan. At the applicant's risk, the final site plan may be combined with improvement plans for permitting, please review the applicable grading permit application for more information.

A. Cover Sheet

1. Revise or include the following information centered at the top of the cover sheet in bold lettering with a font of forty (0.40") point or greater:
    A. Final Site Plan
    B. Project Name
    C. Oro Valley Case Number
2. An approval block is to be listed on the cover sheet with a signature line and date for the following:
    A. Town Engineer
    B. Planning and Zoning Administrator
    C. Oro Valley Water Utility Director
4. In addition to the Conceptual Site Plan notes the following General Notes should be included:
    A. The following general note shall be added for properties located within the La Cholla Airport Environs Zone: All prospective buyers of lots within this subdivision shall be informed of the presence and activity of the La Cholla Airpark, a private airport located (insert direction such as north, south, west or east) of the project. All perspective buyers shall be informed that low flying aircrafts may be a nuisance.
    B. Add the following Engineering notes:
        1. Basis of Elevation (based on published datum), including identification and elevation of additional benchmark(s) used.
        2. Materials within sight visibility triangles must be placed so as not to interfere with a visibility plane described by two horizontal lines located thirty (30) inches and seventy-two (72) inches above finished grade of the roadway surface.
        3. Final Site Plans and Improvement Plan must be approved prior to the issuance of any permits by the Town Engineer and/or Building Official.
        4. All weather access must be provided to all lots within the subdivision.
    C. Add the following Drainage General Notes: (A complete Hydraulic and Hydrologic Drainage Report, prepared by a professional engineer must be submitted and approved prior to approval of the Final Site Plan. The scope and detail of this report must be commensurate with the complexity of the drainage involved.)
        1. All drainage ways will be constructed according to approved plans prior to the issuance of any permits form the Town Engineer and/or

Building Official for parcels affected." Affected parcels must be specifically identified either by number in note or by outline on the development plan.

2. Drainage must be collected and released from a proposed development at the locations and in the manner existing prior to development.
3. Drainage ways must be provided where necessary to carry drainage flows through or from the development and such drainage ways must be dedicated and maintained by property owners or property owner's association.
4. Drainage ways must be designed to not discharge onto paved streets, easements or parking areas.
5. Parking areas must not be used as detention basins.
6. If applicable, list the following notes and complete the blanks.
    i. The following lots are affected by the Town of Oro Valley Floodplain Regulations: _____.
    (List the lots affected by lot number).
    ii. A floodplain use permit and/or finished floor elevation certificates are required for the following lot(s) _____.
    (List the lots affected by lot number).

D. If located outside Oro Valley Water service area, indicate water service provider. Please note, other water service providers may have general note requirements. If located within Oro Valley Water service area, add the following general notes:
    1. Water infrastructure as represented on this plan is for informational purposes only. A separate water improvement plan must be submitted to the Oro Valley Water Utility (OVWU) for technical review and compliance with applicable statutes, codes and specifications. Additional water infrastructure may be deemed necessary upon review of the Water Improvement Plan.

B. **Existing Condition Plan Sheet(s)** – In addition to the conceptual site plan existing conditions, the following information must be shown on all plan sheets to indicate the existing conditions on the site and within one hundred (100) feet of the site. On sites bounded by a street the existing conditions across the street will be provided to a minimum distance of 100 feet.
    1. Provide the recording information and utility locations for existing private or public streets, right-of way (ROW) adjacent to or within the site.
    2. All existing easements shall be drawn on the plan with a dashed line and include recording information, width, and purpose. Label each as existing public, private or specific (e.g., Tucson Electric Power, Southwest Gas). Blanket easements should be listed as notes, together with recordation data and their proposed status. Should an easement not be in use and be proposed for vacation or has been abandoned, so indicate. However, should the

easement conflict with any proposed building location, vacation of the easement must occur prior to approval of plan unless written permission from easement holder(s) is provided.

3. The following existing drainage information shall be identified:
    A. Federally mapped FEMA floodways and floodplains
    B. Erosion Hazard Zone setback boundaries must be delineated by metes & bounds
    C. Depth of flow in all existing channels, depth of inlet headwater for all drainage structures
    D. Depth and extent of ponding in existing detention basins
    E. Depth and extent of ponding in existing water harvesting areas
    F. Pre-developed 100-year flow quantities (Q100) at all concentration points crossing site property boundaries or at structure outlet(s)
4. The following information regarding existing utilities must be provided:
    A. Sanitary and storm sewers, including invert elevations of all manholes and cleanouts. Show the existing sewer lines with thinner, or shaded, lines to distinguish them from the proposed sewer lines
    B. The Pima County Wastewater Management Department (PCWMD) reference number.
    C. The location of gas lines, electric and telephone lines, poles and communications cables
    D. On-ground junction boxes, and streetlights
    E. If water mains and sewers are not located on or adjacent to the tract, indicate by note the direction, distance to, and sizes of those nearest the property intended to service the project.
5. Identify the locations of all utilities and service equipment immediately adjacent to the project.
6. The following existing water infrastructure information must be indicated on the Final Site Plan:
    A. Existing mains indicated with lighter dashed lines
    B. Connection points identified. NOTE: Systems shall be looped
    C. Hydrant locations
    D. Show the location of all post boxes and monument type signs.

C. Proposed Conditions Plan Sheet(s) - In addition to the conceptual site plan existing conditions, the following information on the proposed project must be shown on the drawing or added as notes. This shall include on and off-site elements required for the development.

1. All pad elevations, building finished floor elevations and building envelopes for each building and/or lot.
2. Site Plan elements such as:
    A. Utility locations
    B. On-site pedestrian circulation network, including proposed sidewalks/multi-use paths along abutting right-of-way.
3. Indicate extent of proposed paving on the site in light shading.

4. Show sight visibility triangles with appropriate dimensions at all driveways and street intersections if the sight triangles encroach on the project site or if project landscaping in the street ROW is within the sight triangle. Also delineate the sight visibility triangle for all interior PAAL to PAAL and/or street intersections.
5. Provide the following information for proposed private or public streets and right-of way (ROW) adjacent to or within the site:
    A. Proposed ROW width(s)
    B. Edge and limits of proposed pavement and striping
    C. Proposed street elements such as medians, curbs, sidewalks, and other relevant features
    D. Label all streets as public or private
    E. Proposed traffic control and mitigation facilities and features, such as signalization and signage
6. The following specifications must be provided:
    A. Site/screening wall, screening walls and retaining walls' specifications, including dimensions, materials, color, and decorative features.
    B. Pedestrian circulation and crosswalk paving specifications, including size, color and type of paver, and proposed design.
    C. Bicycle parking specifications for both Class 1 and 2 facilities, including details of proposed parking structures for two-family or multifamily residential complexes.
7. Revise the conceptual grading information to provide schematic level preliminary grading information. If not combining the site plan with the improvement plan, the level of grading should be schematic only, 10 to 20% of construction level of detail. If combining the site plan with the improvement plan, provide enough information to allow detailed checking of grade for such items as ADA and IBC compliance. The minimum information shall consist of:
    A. Proposed approximate building finished floor elevations
    B. Sufficient spot elevations to establish overall site drainage patterns (i.e.: spot grades at drainage break points)
    C. Sufficient spot elevations to verify conformance to Zoning Code cut and fill elevation allowances as well as conformance to the Town's Subdivision Street Standards. Said spot elevations shall be provided at:
        1. All PAAL and street intersections
        2. Internal grade breaks including top and bottom of cut & fill slopes and retaining walls. Also identify the pitch of cut and fill slopes (e.g. 1:1, 2:1, 3:1, etc.)
        3. Beginning and discharge inverts of drainage swales and channels, as well as identifying slope of conveyance
        4. Inlet and outlet inverts of drainage structures
        5. In lieu spot elevations for general graded areas, proposed schematic level contours may be provided instead
8. The following minimum proposed drainage and floodplain information must be delineated:

A. 100-year floodplains with a discharge greater than or equal to 50 cfs.
B. Sheet flooding areas with flood depths greater than or equal to one (1') foot post developed condition.
C. Proposed drainage and erosion mitigation features/structures (e.g. detention basins, culverts, catch basins and storm sewers), flow arrows, lot drainage pattern type and grading breakpoints.
D. All main and sub watershed boundaries per the drainage report.
E. Erosion Hazard Zone setback boundaries must be delineated by metes & bounds.
F. Depth of flow in all proposed channels, depth of inlet headwater for all drainage structures.
G. Depth and extent of ponding in proposed detention basins.
H. Depth and extent of ponding in proposed water harvesting areas.
I. Post developed 100-year flow quantities (Q100) at all drainage structure inlet points, entering and leaving across the site property lines, within all channels and at basin outlet(s).
J. Placement of proposed safety and barricading structures/measures as well as maintenance access features.
K. Demonstrate that International Building Code (IBC) drainage section requirements are being met by spot elevations, drainage typical details, flow arrows, falling slope away from structures and local channel placement with corresponding slope(s).

9. The following sanitary sewer information must be indicated:
   A. Preliminary sewer layout, including points of connection to existing sewers, proposed invert elevations at all manhole locations.
   B. Delineate if sanitary sewer is public or private. All private sewers must be constructed to public specification
   C. The proposed invert elevations for the ends of all culverts, storm sewers, or other underground structures near, or that cross, the existing and proposed public or private sewer lines
10. The following proposed water infrastructure information must be indicated:
   A. Proposed mains shown within easements and indicated with darker solid lines. No pipe sizing, fittings or any other appurtenances to be shown. Easements are to be by separate instrument and submitted to the OVWU during the review process of the Water Improvement Plan
   B. Hydrant locations
   C. Meters shown. If the Final Site Plan is platted, each lot must be metered separately. If a building has one meter and it will be subdivided, explain the billing arrangement. The OVWU is not responsible for individual complaints which are resultant from a subdivided bill
   D. Provide the maximum possible separation from sewer mains and dry utilities
   E. Identify if the development is dependent on an offsite main being constructed and who the responsible party is for the installation of this main
11. Utility easements, when necessary, shall cross 100-year flood limits at right angles or as near right angles as possible.

12. List and delineate on the plan any new proposed easements that will be needed.