SITE DEVELOPMENT DESIGN REQUIREMENTS

This Exhibit prescribes site development requirements to be used in developing residential sites in all housing programs. These requirements cover only those areas which involve health and safety concerns. They are not intended to cover all aspects of site development. Applicants and developers are expected to follow local practice, as a minimum, in all areas of site development not addressed in this Exhibit. When State, local, or other requirements are applicable in addition to FmHA's requirements, the most stringent requirement shall apply.

Proper integration of the natural features of a site with the manmade improvements is one of the most critical aspects of residential development. Poor site planning in large scale subdivisions, rental projects and individual sites, has resulted in a loss of valuable private and public natural resources and caused economic burdens and conditions unsuitable for healthy and pleasant living. Proper site design can preserve desirable natural features of the site, minimize expenses for streets and utilities, and provide a safe and pleasant living environment.

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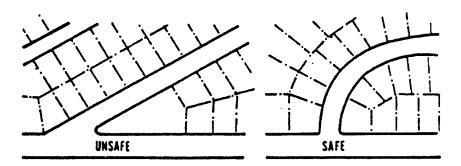
I. STREETS

A. Types

- 1. Collector streets. Collector streets are feeder streets which carry traffic from local streets to the major system of arterial streets and highways. They include the principal entrance streets of residential developments and streets for circulation within such developments.
- 2. Local streets. Local streets are minor streets used primarily for access to abutting properties. These include drives serving multi-family housing units.

B. Design Features

- 1. Emergency Access. Access for fire equipment and other emergency vehicles shall be within 100 feet of main building entrances.
- 2. Cul-de-sacs. Cul-de-sac streets shall have a turn-around with an outside roadway diameter of at least 80 feet, and a right-of-way diameter of at least 100 feet.
- 3. Intersection Angle. Streets shall be laid out to intersect as nearly as possible at right angles and no street shall interest any other street at an angle less than 75 degrees. Curb radii shall be a minimum of 20 feet for street intersections.



4. Intersection Sight Distance. Adequate distances must be maintained at intersections. Vehicles must be visible when within 75 feet of the centerlines of uncontrolled intersecting streets.

C. Street Geometry

- 1. Definitions. The definitions in Sections I.C.1.a and I.C.1.b. apply to the requirements in Section I.C.2.
 - a. Terrain Classifications.
 - (1) Ordinary Slope less than 8%
 - (2) Rolling Slope range of 8% to 15%
 - (3) Hilly Slope greater than 15%
 - b. Development Density. (Number of lots)
 (Land Area minus Undeveloped Areas greater than Average Lot Size)
 - (1) Low Less than 2 lots per acre
 - (2) Medium 2 to 6.0 lots per acre
 - (3) High More than six lots per acre
- 2. Design Requirements. Collector streets and local streets shall comply with the requirements in Tables 1 and 2 unless an exception is granted by the State Director. These requirements may need modification in localities having winter icing conditions.

TABLE 1 Pavement Widths (feet)

	On-Street	Dev	elopment Density	
Street Type	Parallel Parking	Low	Medium	High
Collector	Prohibited	26	32	36
Collector	No Restrictions	36	36	40
Local	Prohibited	18	18	20
Local	Partial, One Side (1)	18	20	26
Local	Partial, One Side (1)	22	26	32
Local	Total, One Side (2)	22	26	26
Local	Total, Both Sides (2)	26	32	36

- (1) At least one parking space per dwelling is provided off-street
- (2) No parking spaces are provided off-street

TABLE 2 Street Design (feet)

			Terrian		
			Ordinary	Rolling	Hilly
1)	Col	lector Street			
	(a)	Minimum centerline radius of curvature	300	225	150
	(ъ)	Minimum sight distance	250	200	150
	(c)	Minimum right-of-way width	60	60	60
2)	Loc	al Street			
	(a)	Minimum centerline radius of curvature	200	150	100
	(b)	Minimum sight distance	200	150	100
	(c)	Minimum right-of-way width ((1) 50	50	50

(1) For cul-de-sac streets, the minimum right-of-way width is 40 feet

D. Construction

Street configuration and wearing surfaces must provide safe and economical access to all building sites. The design and construction of the street shall be appropriate for all anticipated traffic, climatic and soil conditions. Streets shall meet or exceed all local, county, and State requirements.

II. WALKS AND STEPS

A. Walks

Where walks are provided, they shall be located to assure a minimum vertical clearance of 7 feet from all permanent or temporary obstructions. Walks shall have a slip resistant surface.

B. Exterior Steps Not Contiguous to Dwelling or Building

I. Flight

a. Single steps or flights of steps exceeding a vertical height of 12 feet shall not be accepted.

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o. Steps shall be set back from an intersecting walk or drive a minimum of 1 foot at a retaining wall and 2 feet at slopes.

2. Risers and Treads

- a. Risers shall be a maximum of 6 inches, a minimum of 3 inches and uniform throughout the flight.
- b. Treads shall be a minimum of 12 inches and uniform throughout the flight.
- c. Treads shall have a slip resistant surface.
- d. Treads shall be pitched appropriately to ensure drainage.

3. Landings

- a. Minimum length shall equal 3 feet or walk width whichever is greater.
- b. A change in direction in a flight of stairs shall be accomplished only at a landing or by a winder which has a tread width at a point 18 inches from the converging end, equal to the full straigth stair tread width.

4. Handrails

Stairways having a flight rise exceeding 30 inches shall have a 36 inch high handrail located on one side for stairs 5 feet or less in width and on both sides of stairways over 5 feet wide.

III. GRADING

A. Compaction

All fill for street or home construction shall have compaction of not less than 95 percent maximum density, as determined by proctor or other accepted testing methods. Maximum thickness of compaction layers shall be 6 inches except where compaction equipment of demonstrated capability is used under the direction of a qualified soils engineer. Earth fill used to support a building foundation shall be a controlled fill which is designed, supervised, and tested by a qualified soils engineer in accordance with good practice.

B. Gradients

Grading design shall be arranged to assure safe and convenient all-weather pedestrain and vehicular access to residential buildings and to all other necessary site facilities. Site grading shall be designed to establish building floor elevations and ground surface grades which allow drainage of surface water away from buildings and adjacent sites. Grading design shall conform with the Tables 3 and 4.

TABLE 3 Access and Parking Gradients (1)

	MINIMUM		MAXIMU	M
	Cener Line	Crown or Cross Slope	Center Line	Crown or Cross SLope
STREETS	0.5%	1.0%	14.0%	5.0%
STREET INTERSECTIONS	0.5%	1.0%	5.0% (2)	5.0%
DRIVEWAYS (3)	0.5%	1.0%	14.0%	5.0%
SIDEWALKS (4)				
Concrete Bituminous Building Entrances &	ı	0.5% 1.0%		
Short Walks Main Walks Adjoining Steps Landings	1.0%	1,0%	12.0% 10.0% 2.0%	5.0% 5.0%
Stepped Ramp Treads	1.0%		2.0%	5.0%
PARKING		0.5%	5.0%	5.0%

⁽¹⁾ Approximte Equivalents .5% = 1/16"/ft., 1.0% = 1/8"/ft., 2.0% = 1/4"ft., 5.0% = 5/8"/ft., 10.0% = 1 1/4"/ft., 12.0% = 1 1/2"/ft., 21% = 2 5/8" ft.

⁽²⁾ Grades approaching intersections shall not exceed 5 percent for a distance of not less than 100 feet from the centerline of the intersection.

⁽³⁾ Vertical transitions shall precent contact of car undercarriage of bumper with driveway surface.

⁽⁴⁾ Five percent maximum for major use by elderly tenants.

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TABLE 4 Slope Gradients (1)

	MINIMUM	MAXIMUM
SLOPE AWAY FROM FOUNDATIONS		
Pervious Surfaces	5.0% (2)	21.0% (3)
Impervious Surfaces	1.0% (2)	21.0% (3)
PREVIOUS SURFACES		
Ground Frost Areas	2.0%	
Non-Ground Frost Areas	1.0% (4)	
IMPERVIOUS SURFACES	0.5%	
SLOPES TO BE MAINTAINED BY		
MACHINE		33.0% (3:1)

- (1) See Table 3, footnote (1).
- (2) Minimum length of 10 feet or as limited by property lines.
- (3) Minimum length of 4 feet.
- (4) The minimum is 2.0% if the annual precipitation is more than 50 inches.

IV. DRAINAGE

A. General

- 1. Collection and Disposal. Surface and subsurface drainage systems shall be provided, as appropriate, for collection and disposal of storm drainage and subsurface water. These systems shall provide for the safety and convenience of occupants. They shall protect dwellings, other improvements and useable lot areas from water damage, flooding, and erosion.
- 2. Concentrated Flow. Where storm drainage flow is concentrated, permanently maintained facilities shall be provided to prevent significant erosion and other damage or flooding on site or on adjacent properties.
- B. Drainage Design and Flood Hazard Exposure
 - 1. Storm Frequency. Drainage facilities shall be designed for a 10 year storm frequency of 24-hour duration. Full potential development of all contributing areas shall be used as a basis for this determination.

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- 2. Street Drainage. Streets shall be useable during runoff equivalent to a 10-year return frequency. Where drainage outfall is inadequate to prevent runoff equivalent to a 10-year return frequency from ponding over 6 inches deep, streets shall be made passable for local commonly used emergency vehicles during runoff equivalent to a 25-year return frequency except where an alternative access street not subject to such ponding is available.
- 3. Foundation Drainage. Appropriate crawl space and foundation drainage shall be provided for the removal of subsurface moisture.

C. Primary Storm Sewer

- 1. Pipe Size. Pipe size for the primary storm sewer (any storm sewer or inlet lateral located in a street or other public right-of-way) shall have an inside diameter based on design analysis but not less than 15 inches. Where anticipated runoff from the five-year return frequency rainfall will not fill a 15 inch pipe, a primary storm sewer system usually is unnecessary.
- 2. Minimum Gradient. Minimum gradient shall be selected to provide for self-scouring of the conduit under low-flow conditions and for removal of sediments foreseeable from the drainage area.
- 3. Easements. Easements for storm sewers shall be a minimum of 10 feet in width.

D. Drainage Swals and Gutters

- 1. Design. Paved gutters shall have a minimum grade of 0.5 percent. Paved gutters and unpaved drainage swales shall have adequate depth and width to accommodate the maximum foreseeable runoff without overflow. Swales and gutters shall be seeded, sodded, sprigged or paved as appropriate to minimize potential erosion. Side slopes shall be no steeper than 2:1.
- 2. Easements. Surface channels shall have an easement which is at least the width of the channel plus 10 feet.

E. Downspouts

1. Outfall. Where downspouts are provided, they shall either be connected to an available storm sewer, provided with suitable splash blocks, or empty at acceptable locations onto paved areas so that water drains away from buildings. Downspouts shall not connect to sanitary sewers.

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2. Piped Drainage. Piped roof drainage from buildings shall be connected to available storm sewers or empty at locations where no erosion or other damage will be caused.

F. Storm Inlets and Catch Basins

- 1. Openings. Where inlets are accessible to small children, openings shall have one dimension limited to 6 inch access. Inlet openings in paved areas shall be designed to avoid entrapment or impedence of bicycles, baby carriages, etc.
- 2. Access. Access for cleaning shall be provided to all inlet boxes and catch basins.

G. Drywells

Drywells for the disposal of water from foundation drains, crawl spaces, and other small quantity sources shall be permissible where the bottom of drywells project into strata of undistributed porous soil at a level where the bottom of the drywell will be above the ground water table at its highest seasonal elevation.

V. WATER SUPPLY SYSTEMS

A. Individual Water Systems

1. General

- a. In this subpart, an individual water system is a system which serves fewer customers or connections than the lower threshold for community systems stated in the Safe Drinking Water Act.
- b. The system for an individual household should be capable of delivering a sustained flow of 5 gpm. A system suppplying water to multiple household shall be designed by a Professional Engineer and have sufficient capacity to serve estimated demand. A test of at least 4 hours duration shall be conducted to determine the yield and maximum drawdown for all wells developed as part of an individual water system. This test may be waived by the State Office based on the hydrologic and geologic conditions in the area.

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- c. Water that requires continual or repetitive treatment to be safe bacterially is not acceptable.
- d. After installation, the system should be disinfected in accordance with the recommendations of the health authority. In the absence of a health authority, system cleaning and disinfection should conform with the current EPA Manual of Individual Water Supply Systems.
- e. Any method for individual water supply contained herein which is not permitted by the local health authority having jurisdiction shall not be used.

2. Well Location

- a. A well located within the foundation walls of a dwelling is not acceptable except in artic and sub-artic regions.
- b. Water which comes from any soil formation which may be polluted or contaminated or is fissured or creviced or which is less than 20 feet below the natural ground surface (subject to the requirements of the local health authority) is not acceptable.
- c. Individual water supply systems are not acceptable for individual lots in areas where chemical soil poisoning is practiced if the overburden of soil between the ground surface and the water bearing strata is coarse-grained sand, gravel, or porous rock, or is creviced in a manner which will permit the recharge water to carry the toxicants into the zone of saturation.
- d. Table 5 shall be used in establishing the minimum acceptable distances between wells and sources of pollution located on either the same or adjoining lots. These distances may be increased by either the health authority having jursidication or the FmHA State Director.

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TABLE 5 Distance from Source of Pollution

Source of Pollution	Minimum Horizontal Distance (Feet)
Property Line	10
Septic Tank	50
Absorption field	100 (1)
Seepage pit	100 (1)
Absorption Bed	100 (1)
Sewer Lines w/ Permanent	
Watertight Joints	10
Other Sewer Lines	50
Chemically Poisoned Soil	100 (1)
Dry Well	50
Other	(2)

- Notes (1) The horizontal distance between the sewage absorption system and the well, or the chemically poisoned soil and the well, may be reduced to 50 feet only where the ground surface is effectively separated from the water bearing formation by an extensive, continuous impervious strata of clay, hard-pan, or rock. The well shall be constructed so as to prevent the entrance of surface water and contaminants.
 - (2) Other sources of pollution could be fuel oil or gasoline storage tanks, farm yards or chemical storage tanks, etc. The well should be separated from these sources of pollution a distance recommended by the local health authority.

3. Well Construction

- a. The well shall be constructed to allow the pump to be easily placed and to function propertly.
- b. All drilled wells shall be provided with a sound, durable and watertight casing capable of sustaining the loads imposed. The casing shall extend from a point several feet below the water level at drawdown or from an impervious strata above the water level, to 12 inches above either the ground surface or the pump room floor. The casing shall be sealed at the upper opening.

- c. Bored wells shall be lined with concrete, vitrified clay, or equivalent materials.
- d. The space between the casing or liner and the wall of the well hole shall be sealed with cement grout.
- e. The well casing shall not be used to convey water except under positive pressure. A separate drop pipe shall be used for suction line.
- f. When sand or silt is encountered in the water-bearing formation, the well shall either be gravel packed, or a removable strainer or screen shall be installed.
- g. The surface of the ground above and around the well shall be graded to drain surface water away from the well.
- h. Openings in the casing, cap, or concrete cover for the entrance of pipes, pump or manholes, shall be made watertight.
- i. If a breather is provided, it shall extend above the highest level to which surface water may rise. The breather shall be watertight, and the open end shall be screened and positioned to prevent entry of dust, insects and foreign objects.

4. Pumps and Equipment

- a. Pumps shall be capable of delivering the volume of water required herein under normal operating pressures within the living unit. Well pump capacity shall not exceed the output of the well.
- b. Pumps and equipment shall be mounted to be free of objectionable noises, vibrations, flooding, pollution, and freezing.
- c. Suction lines shall terminate below maximum drawdown of the water level in the well.
- d. Horizontal segments of suction line shall be placed below the frost line in a sealed casing pipe or in at least 4 inches of concrete. The distance from suction line to sources of pollution shall be not less than shown in Table 5.

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5. Storage Tanks

- a. A system for an individual household shall include a pressure tank having a minimum capacity of 42 gallons. However, prepressured tanks and other pressurizing devices are acceptable provided that delivery between pump cycles equals or exceed that of a 42 gallon tank. Storage capacity on a system for multiple households must be sufficient to meet estimated peak demands.
- b. Tanks shall be equipped with a clean-out plug at the lowest point, and if pressurized, a suitable pressure relief value.
- c. When additional storage is necessary because the well yield will not meet the system peak demands, all nonpressureized intermediate tanks shall be designed and installed in a manner that will prevent the pollution or degradation of the water supply.

B. Community Water Systems

- 1. Definition. In this Subpart, a community water system is a system which meets the definition in the Safe Drinking Water Act.
- Design. A community water system shall be designed by a qualified, professional engineer licensed in the state in which the water system will be located. Community water systems shall comply with all Federal and state laws.

VI. WASTEWATE DISPOSAL SYSTEMS

Each dwelling shall be provided with a water-carried system adequate to dispose of domestic wastes in a manner which will not create a nuisance, contaminate any existing or prospective water source or water supply, or in any way endanger the public health.

A. Individual Wastewater Disposal Systems

1. General

- a. In this subpart, an individual wastewater disposal system is a sewage disposal system which serves only 1 dwelling unit.
- b. When service from an acceptable public or community system is not available or feasible, and ground water and soil conditions are acceptable, an individual system may be used.
- c. Each individual wastewater disposal system shall consist of a house sewer, a pretreatment unit (e.g. septic tank, individual package treatment plant), and acceptable absorption system (subsurface absorption field, seepage

pit(s), or subsurface absorption bed). The system shall be designed to receive all sanitary sewage (bathrooms, kitchen and laundry) from the dwelling, but not footing or roof drainage. It shall be designed so that gases generated anywhere in the system can easily flow back to the building sewer stack.

2. Percolation Tests

- a. Percolation tests are required unless a waiver is granted by the National Office. Waivers may be granted on a statewide or local basis in cases where an onsite evaluation of soils would be performed by a qualified soil technician, soil scientist, or engineer. Requests for waivers must describe the qualifications of the person evaluating the soils and discuss the criteria to be used in designing the absorption system.
- b. In uniform soils one percolation test shall be made within each area proposed for an absorption system. If significant soil variations are encountered or expected, additional tests shall be made for each variation.
- c. Percolation tests shall be conducted in accordance with good practice. Guidance for performing these tests is included in the EPA design manual, "Onsite Wastewater Treatment and Disposal Systems."

3. Subsurface Absorption System

- a. Where percolation rates, soil characteristics and site conditions are acceptable, an absorption system may be installed in an area which is well drained, has an acceptable slope, and is acceptable for excavation.
- b. Soils with percolation rates less than I minute per inch may be used if the soil is replaced with a layer of loamy or fine sand at least 2 feet thick. (Refer to the EPA Design Manual, "Onsite Wastewater Treatment and Disposal System").
- c. Soils with percolation rates greater than 60 minutes per inch are not acceptable for subsurface wastewater disposal systems.

B. Community Wastewater Disposal Systems

- 1. <u>Definition</u>. In this subpart, a community wastewater disposal system is any wastewater disposal system which serves more than 1 dwelling unit.
- 2. Design. A community wastewater disposal system shall be design by a qualified, professional engineer licensed in the state in which the sytem will be located.

U.S. DEPARTMENT OF AGRICULTURE Farmers Home Administration

CHECKLIST OF VISUAL EXHIBITS AND DOCUMENTATION FOR RRH, RCH, AND Ill PROPOSALS

This Exhibit lists visual exhibits and documentation necessary for FmHA to properly evaluate proposed development. Intermediate consultation by the applicant, builder-developer and others hereafter referred to as the sponsor with the FmHA District or State Offices should be as frequent as necessary to reduce chances of misunderstandings and limit the amount of nonproductive time and expense for all parties concerned.

- I <u>PREAPPLICATION SUBMISSION DOCUMENTS</u>: The sponsor will submit the following information to the District Director to determine feasibility of the project and general conformance with FmHA policy:
 - A. <u>Environmental review requirements</u>. As requested by the Agency, the applicant is responsible for providing details of the project's potential impact on the human environment and historic properties, in accordance with 7 CFR part 1970. Guidance concerning the environmental review requirements is available at any Agency office or on the Agency's website. (Revised 04-01-2016, SPECIAL PN.)
 - B <u>Location Map</u>. A general site location map of the area indicating the adjacent land zoning and uses, the present and future access roads to the site as well as the proximity to shopping, schools, churches, and major transportation facilities with note of traffic volumes. If a satisfactory map of the locality is not available, a clear and preferably scaled rough sketch map that provides the required information will be sufficient.
 - C <u>Property Survey Map.</u> A current survey map-of the project site showing the boundaries as well as all existing known features specifically including utilities, easements, access roads, floodplains, drainageways, rock outcroppings and wooded areas of specimen trees. If a current survey does not exist, the most accurate document which is available will be submitted.
 - D <u>Soils Map and Report</u>. A complete soils map and report, including "site specific" interpretations and recommendations, from the local or county representative of the U.S. Department of Agriculture, Soil Conservation Service §CS) Office will be included with the location and feasibility submission. A determination of whether or not any lands described in USDA Regulation 9500-3 are impacted by the proposed development should also be included. The local SCS office may provide recommendations for the development of suitable drainage and landscaping plans later in the planning process.
 - E Market Survey. A market survey will be submitted inaccordance with the requirements of the respective loan program as indicated in Part, 1944, Subparts D and E of this chapter. (Revised 02-21-91, SPECIAL PN.)

(6-22-87) SPECIAL PN

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- F Request for Exceptions. Any need for State or National Office exception(s) should be identified at this stage in the processing. Appropriate exception(s) should be requested and obtained before proceeding to the preliminary submission:
- G. Other. The applicant will need to submit any additional information that may be needed as indicated in Subpart D or Exhibit A-7 of Subpart E of Part 1944 of this chapter. This may include but is not limited to: (Revised 02-21-91, SPECIAL PN.)
 - 1 Schematic design drawings showing the proposed plot plan, typical unit plans, and elevations. If available, the proposed preliminary drawings and specifications may be submitted. This would be of assistance if it is determined that the loan must receive National Office authorization.
 - 2 Type of construction.
 - 3 The total number of living units and the number of each type of living unit proposed.
 - 4 Type of utilities such as water, sewer, gas, and electricity and whether each is public, community, or individually owned.
- II <u>APPLICATION SUBMISSION DOCUMENTS</u>: After it is determined by FmHA that the project is feasible and the location conforms with the intent of the funding program, the sponsor will submit the following information to the District Director in addition to those materials submitted previously.
 - A <u>Property Survey</u>. A survey where 1 inch represents no more than 100 feet) of the property lot showing the exact boundaries and corners of the property accompanied by a written description of said boundaries. Also, locations of predominant features such as utilities, easements, access points, floodplains, drainageways, rock outcroppings and wooded areas or specimen trees affecting the proposed development must be included. This document shall bear the seal of a professional licensed to provide surveying services in the State in which the project will be located. This survey could be a part of item D below.
 - B <u>Topographic Map</u>. An accurate topographic map showing existing and proposed contours with a scale compatible with the size of the project. The site shall be shown at a reasonable scale with 5-foot contour intervals. Where the site is unusually level or steep, the contour intervals may be varied accordingly.
 - C Preliminary Site Plan. A line drawing, to scale, showing proposed street locations with profiles and widths, lot layouts, major drainageways, and other development planned. Preliminary sections and details shall be provided for the street construction, curbs and gutters, drainageways, and other physical improvements.

- D Preliminary Dwelling Drawings and Specifications. Drawings of the dwelling units, preliminary floor plans and specifications, elevations and sample site plans showing the placement of the individual buildings should be submitted.
- E Statement of Planning and Zoning Compliance. Local, county and State approvals as applicable. If change of zoning or variance is required, the status of the variance or change of zoning shall be documented.
- F Technical Service Contracts. Executed contracts for the professional services of a architect, engineer, land surveyor, landscape architect, site planner and/or soil engineer will be submitted as appropriate for the planning of the proposed development.
- G Utility Approvals. Statements of approval and feasibility for utility systems as follows:
 - l Verification of adequate capacity and approval to tie-in with local existing water, wastewater disposal, electric, telephone, and other utility systems, as appropriate.
 - 2 Tentative approval of local or State health authority for individual water and/or wastewater disposal systems when it is clear that central systems are unfeasible at this time. Use §1924.108 (a)(5) of this subpart when preparing information required.
- H Facility Acceptance. Evidence that the appropriate public body is willing to accept and maintain streets, common areas, lighting, fire hydrants, sidewalks, drainageways, and utilities, as appropriate, when dedicated to said body.
- I Preliminary Specifications. Outline specifications describing all the proposed materials to be used and how they are to be applied. These are only the materials used in the land development and construction of the streets, drainage, and utility work.
- J Incremental Slopes Plan. If areas of common slope are not identified elsewhere in adequate detail, this information should be provided in a separate plan.
- K Preliminary Grading Plan. This plan will indicate degree of work required to provide positive drainage of all building sites and control measures to be taken to eliminate soil erosion. Dwelling locations may be shown if they can be predetermined.

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- L Other. The applicant will need to submit any additional information that may be needed as indicated in the respective loan program regulations as indicated in Part 1944, Subparts D and E and Part 1822 Subpart F this chapter (FmHA Instruction 444.7). This may include but, not be limited to:
 - l A detailed trade-item cost breakdown of the project for such items as land and right-of-way, building construction, equipment, utility connections, architectural/engineering and legal fees, and both on- and off-site improvements. The cost breakdown also should show separately the items not included in the loan, such as furnishings and equipment. This trade-item cost breakdown should be updated just prior to loan approval.
 - 2 Information on the method of construction, on the proposed contractor if a construction contract is to be negotiated and on the architectural, engineering, and legal services to be provided.
 - 3 For all projects containing over four units the applicant will submit an Affirmative Fair Housing Marketing Plan for approval by FmHA in accordance with \$1901.203 of Subpart E to Part 1901 of this chapter. The Affirmative Fair Housing Marketing Plan must be prepared in a complete, meaningful, responsive and detailed manner.
 - 4 A description and justification of any related facilities (including but not limited to workshops, community buildings, recreation center, central cooking and dining facilities, or other similar facilities to meet essential needs) to be financed wholly or in part with loan funds.

III TECHNICAL DOCUMENTS NECESSARY FOR THE OBLIGATION OF FUNDS. All decisions regarding the conceptual design of the proposed project should be made prior to this submission. This effort is mainly to demonstrate that those agreed upon concepts have been transformed into construction documents and the necessary approvals have been granted. All items requiring revision or more detailed information as determined by the review of the preliminary submission will be resolved before the sponsor prepares the final submission. All documents shall be executed in a professional manner and shall carry the appropriate designation attesting to the professional qualifications of the architect, engineer, land surveyor or site planner. All documents will be accurately drawn at an appropriate scale.