USDA
MN 1942-A, Guide 27
Rev. 03/2013

United States Department of Agriculture

INFORMATION AND FORMS FOR ARCHITECTS OF COMMUNITY FACILITY PROJECTS

USDA PLAN REVIEWS

I. Preliminary Review

A. Map of town – indicate location of proposed site.
B. Outline specifications.
C. Preliminary plans:
- Site plan
- Floor plans
- Typical elevation
- Typical wall section

D. Photos of site and surrounding area
E. Environmental issues – indicate floodplains, wetlands, etc.

II. Intermediate Review – May be required depending on the preliminary review findings.

III. Final Review

A. Final specifications signed by the project architect/engineer including all the required USDA forms.
B. Final plans signed by the appropriate project architect and engineer(s).
C. Soil boring report
D. Site survey including topographic information at 1' intervals.
E. See page 10 for USDA forms required to be included in the specifications.

IV. Other Reviews

The USDA Architect/Construction Analyst/Specialist will review the plans and specs to verify that necessary revisions since the final review have been incorporated into the plans and specs or are incorporated by addendum.

Note: When possible, prior to bidding, the following plan reviews must be completed with a copy submitted to the USDA specialist processing the loan:

A. MN Department of Health, Plumbing Unit plan review.
B. Local Official's plan review. This includes the Building Official, Fire Marshall, City Engineer, Fire Chief or other local reviews that is required.
C. Buildings which contain an operation which must be licensed by the state (hospital, nursing home, day care facility, etc.) must be reviewed by the State Building Code Division in St. Paul.

FORMS TO BE INCLUDED IN CF OWNER/ARCHITECT AGREEMENT

1. AIA B101-2007 "Standard Form of Agreement between Owner and Architect with Standard Form of Architect's Services"

2. RD MN 1942-A, Guide 27, Attachment 1 (4/2011) "Attachment to AIA B101-2007"

3. AD -1048, Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

SURVEY

A land survey is required for all projects involving new construction and must include the following information:

1. Boundary delineation with a signature of a registered land surveyor.
2. Topographical representation in one foot (300 mm) increments
3. Utility information relative to"
   - Sewers – type, size and location
   - Water – main location and size
   - Gas service location
   - Electric service location and transformer location
   - Telephone equipment location
4. Location and description of all easements; utility, drainage, right-of-ways, set-backs, etc.
5. Location and description of all structures on the site; building, foundations, basements, slabs, retaining walls, cisterns, septic tanks, above and below ground storage tanks, etc.
6. Location and identification of all trees with a trunk size of 3" (76 mm) or greater in diameter.
7. Description of all surrounding highways, streets, alleys, sidewalks, railroads, traffic direction and restrictions, etc.
8. Narrative description of any unusual and/or prominent site features or surrounding site features including neighboring structures, wetlands, floodplains, drainage ditches or swales, noise or pollution producing facilities, etc.

SOIL BORINGS

Soil boring information from a commercial soil testing company is required for all projects involving new construction and must contain the following:

1. Test borings must be a minimum depth of 15' (4.6 m).
2. Test borings must contain a soil classification along with a brief narrative describing their characteristics.
3. Test borings must have an indication of bearing capacity, preferably by the standard penetration test.
4. Test boring information must contain a map indicating relative location of the borings to the building. Borings must be within the boundary of the proposed construction.
5. Test borings report must contain a brief narrative describing anticipated footing and foundation problems or conditions along with a recommended minimum bearing capacity and foundation design.
6. Reports for construction that include asphalt or concrete drives or parking areas, shall include design recommendations based upon tests taken in those areas.

A soil boring must be taken for every 3000 square ft. (280 m^2) increment of the total area covered by the building. Provide a minimum of two per building within the building location. Provide additional borings as needed when previous structures have been located on the site or borings indicate inconsistent results.

SITE PLANNING REQUIREMENTS

1. Adequate parking shall be provided on site to meet the needs of the building occupants and visitors. Provide the required number of accessible parking spaces with at least one meeting the van-accessible requirements.

2. When a sidewalk is located at the front of parking spaces and cars may overhang the curb, the walk must be at least 6' (1800 mm) wide to maintain a clear walkway at least 36" wide.

3. Dumpsters and recycling containers shall be screened from public view.

4. Finished grade must slope away from the building 6" in the first 10'. See accessibility requirements on page 6 for slopes of walks, stoops, etc.

5. Down spouts must be located to avoid drainage of water across sidewalks.

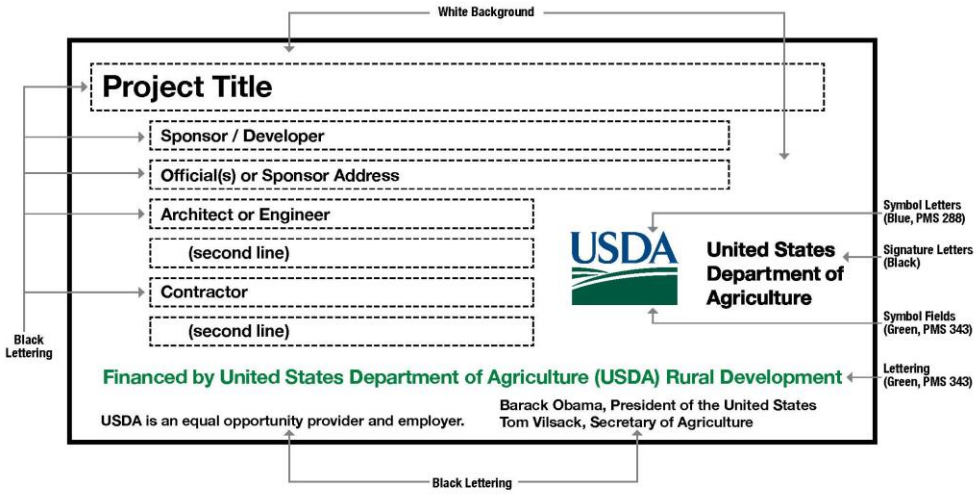
6. Provide a landscaping plan with the final plans. Avoid Landscaping allowances. If the owner plans to complete the landscaping, a plan and schedule (signed by the owner) for completing the work would be required. Utilize native prairie grasses to minimize lawn areas if possible.

7. Standing water on the site is not permitted. The minimum slope of paved areas is 1% and the minimum slope of lawn areas is 2%.

8. Where possible, special emphasis should be placed on visual screening of parking lots with berms, landscaping materials, etc.

9. Provide a temporary construction sign as shown below. The sign shall be professionally designed and lettered, of sturdy construction and permanently installed within 30 days of the Notice to Proceed and prior to first pay request. Sign shall remain in place until the final inspection is completed.

TEMPORARY CONSTRUCTION SIGN FOR RURAL DEVELOPMENT PROJECTS



SIGN DIMENSIONS: 1200 mm x 2400 mm x 19 mm (approx. 4' x 8' x ¾")
PLYWOOD PANEL (APA RATED A-B GRADE–EXTERIOR)

General Design Requirements

1. The facility shall be designed to meet the needs of the occupants and serve the purpose for which it is constructed. The design shall be **modest, energy efficient, and utilize low maintenance materials.** Heating, ventilation and air conditioning systems shall be the most fuel efficient system that is economically feasible over the life of the system. Materials and products made from recycled materials shall be considered for use where practicable.

2. All buildings shall meet or exceed the requirements of the MN State Energy Code. Consider building orientation, wind direction, roof overhangs, and passive solar techniques to develop as energy efficient design as life cycle costs indicate as being economically feasible. Windows should be at least double low "e" glass with argon gas.

3. Install outdoor boiler reset and cutoffs, and provide timer controls for exterior lighting, interior lighting, ventilation, circulating pumps, etc. to reduce energy consumption where possible.

4. Interior vapor barriers at walls and ceiling shall be carefully sealed around electrical boxes, wires, pipes, ducts, etc. to prevent air leakage into wall cavity or attic space.

5. For energy conservation and comfort of interior spaces, provide a vestibule at all public entrances which may be used on a daily basis.

6. In assisted living units, provide a cove heater with wall thermostat in each unit bathroom.

7. To assist in the control of interior humidity within assisted living dwelling units, if no central ventilation system in the units is provided, bath and kitchen exhaust fans must be ducted to the exterior. Ducts located within attics shall be entirely insulated. The last 6' (1800 mm) of horizontal ducts within joist spaces must be insulated and sloped down to the exterior wall louver. Back-draft dampers shall be provided in exterior wall and roof caps.

8. Combustion furnaces must have the required supply of combustion air from the outside. Mechanical rooms must also be ventilated per code to prevent overheating of the room.

9. Locate bathtubs so that the necessary access panel to the tub plumbing will not occur in a rated wall.

10. All wood in contact with concrete shall be pressure treated wood.

11. Roof trusses on residential buildings shall be designed for 40 pound (18 kg) live load state wide. Non-residential buildings to comply with MN state code requirements for the area in which the building is located. Truss designs to be certified by an engineer licensed in MN.

12. In assisted living facilities, the living/dining windows should allow visibility to the exterior from a seated position.

13. Plans and specifications should be carefully reviewed to remove redundancy or confusion. Minimize the number of sheets of plans and specification without sacrificing clarity. Print specifications "duplex" to save paper and minimize weight.

ACCESSIBILITY REQUIREMENTS

1. Buildings shall comply with the following standards. The more stringent shall apply.

   - Uniform Federal Accessibility Standards (UFAS)
   - Americans with Disabilities Act (ADA)
   - Minnesota Accessibility Code

2. In order to allow for some minor construction tolerances in the field, the slopes of items on the accessible route should be designed to be slightly less than the maximum slopes indicated below:
   - Accessible parking spaces, access aisles, and driveways at drop-off locations – 2%
   - Curb cuts and side slopes of curb cuts – 8.33%
   - Sidewalks – 5% in direction of travel, 2% cross slope
   - Entry stoops – 2%
   - Interior ramps – 8.33%

   The slopes of the above items may be verified with a digital level. Those items which exceed the maximums will not be accepted.

3. Provide at least one van-accessible parking space. An 11' parking space adjacent to a 5' access aisle is recommended. An 8' parking space and 8' access aisle may also be accepted. The sign shall indicate "van-accessible".

4. In fully accessible living unit bathrooms, provide a roll-in shower stall with required grab bars and seat. Maximum threshold height at shower is ½".

5. In facilities where residential laundry equipment is provided, at least one of the washing machines must be front loading.

6. Specific details showing the method of connecting on-grade sidewalks to entry stoops on frost footings are needed to deal with the potential problem of frost action or settling of the walk.

7. At accessible entrances, the maximum threshold height is ½" if beveled. This requires the entry stoop elevation to be flush with the building floor elevation to accommodate a low threshold.

BIDDING PROCEDURES

1. The final plans and specifications are to be made available to USDA for review by the USDA Architect prior to authorization to bid. The USDA Specialist will inform the owner in writing when bidding is authorized.

2. All projects will be bid and constructed under one combined contract between the owner and the general contractor. All interested qualified bidders must be given an opportunity to bid. The project architect must be in charge of the plan distribution and bid opening.

3. Plans and specifications should be provided to all Builders' Exchanges serving the area, "Dodge Reports", and the "Construction Bulletin". Owners may wish to advertise in local papers to inform local contractors of the proposed project.

4. Plans and specifications are to be at all Builders' Exchanges listed in the Advertisement for Bids at least 21 days prior to the bid date. Addendums should be provided to all plan holders at least 3 days prior to bid date.

5. The project architect shall set a reasonable length of construction time on the bid form (RD 1942-A, Guide 19, Attachment 3) in the specifications. The time should allow for approximately 30 days more than the expected length of construction.

6. The project architect in consultation with the owner shall specify the amount of liquidated damages on the bid form (RD 1942-A, Guide 19, Attachment 3) and also on the USDA attachment to the AIA Agreement between Owner and Contractor (RD 1942-A, Guide 27, Attachment 3). Liquidated damages will be specified to cover the owner's expected actual costs incurred due to construction not being completed on schedule such as daily interest costs, additional architect/engineer inspection fees, etc.

7. If alternate bids are desired, they should be listed as add alternates in the order they would be selected if funds allow. The less costly system should be the base bid. USDA concurrence on the selection of alternates should be obtained prior to preparing the contracts for execution.

8. After the bid opening, the architect shall make a written recommendation to the owner on the selection of the low bidder. A copy of this letter along with the low bidders bid documents indicated by "B" on page 10 shall be submitted to the USDA Specialist for review.

9. Once owner, architect, and USDA are in agreement, the Notice of Award (RD 1942-A, Guide 19, Attachment 7) can be issued to the successful bidder.

10. The project architect will then prepare 4 original sets of the Contract between the owner and contractor including the items indicated by "C" on page 9 plus the contractor's insurance documents. After execution of the contract by the owner and contractor and concurrence by the owner's attorney (RD 1942-A, Guide 18, Page 7), the 4 sets of contracts are submitted to the USDA Specialist for USDA concurrence. The four sets are then distributed to the owner, contractor, project architect, and USDA. *(Note: Bonds must be on USDA Forms listed on page 10.)*

11. Once the contracts have been fully executed at noted above, the Pre-construction Conference can be scheduled. The owner may then issue the Notice to Proceed to the contractor.

PRECONSTRUCTION CONFERENCE

1. To be attended by:

    a. Owner(s)
    b. Contractor
    c. Architect
    d. Specialist
    e. Architect/Construction Analyst/Specialist

2. Discussion will include:

    a. Changes in plans and specifications since final plan review.
    b. Addendums and alternates
    c. Insurance and bonds
    d. Environmental mitigation required
    e. Contractor's responsibility
    f. Architect's responsibility
    g. Processing of pay requests and change orders
    h. Review of subcontractors, suppliers, and project schedule
    i. Owner's responsibility
    j. USDA Architect/Construction Analyst/Specialist duties

3. A total of 6 sets of plans and specifications are needed at the preconstruction conference. Additional sets of plans and specs may be requested by the owner and/or contractor. The front page of four sets of the Plans and the accompanying specifications will be signed by the Owner, Contractor, Architect, and USDA Representative. These plans are to be distributed to the following persons:

    a. Owner (signed set)
    b. Contractor (signed set)
    c. Architect (signed set)
    d. USDA Specialist (signed set)
    e. USDA Architect/Construction Analyst/Specialist
    f. USDA State Office

MISCELLANEOUS REQUIREMENTS

1. Requests to use Construction Management services are typically **not** approved. Submission of information and justification to the USDA National Office for their review is required. If approved, the Construction Manager must become the General Contractor and provide **one fixed price contract** to the owner including payment and performance bonds.

2. AIA G704, Certificate of Substantial Completion, should be completed by the architect, contractor, and owner at the time of substantial completion with a copy to the USDA Specialist. The number of days to complete the punch list items shall be specified on G 704.

3. In addition to the project architect, the mechanical and electrical engineers should attend the substantial completion inspection to verify compliance with plans and specifications.

4. HUD Material Specification Requirements apply to USDA financed assisted living facilities.

Verify that specified products comply with the following Use of Materials Bulletins
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/ or ASTM standards:

CONCRETE ROOFING TILE um17e http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um17e.pdf

GRADE MARKING OF LUMBER um38j http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um38j.pdf
Canadian Mill Service Association
http://www.cwc.ca/SearchResults.htm?Language=EN&Query=mill%20service%20association

PLYWOOD AND OTHER PERFORMANCE RATED WOOD-BASED STRUCTURAL-USE PANELS um40c
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um40c.pdf
RADCO, Inc. http://www.radcoinc.com/
Timber Products Inspection, Inc. http://www.tpinspection.com//

CARPET um44d http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um44d.pdf

PRESSURE-TREATED LUMBER AND PLYWOOD um48
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um48.pdf

WOOD FINISH DOORS um52a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um52a.pdf

ACRYLIC PLASTIC SHEETS AND GLAZING um58a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um58a.pdf

CONSTRUCTION ADHESIVES FOR WOOD FLOOR SYSTEMS um60a
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um60a.pdf
RADCO, Inc. http://www.radcoinc.com/
Akron Rubber http://www.ardl.com/

FACTORY-APPLIED LAMINATE ROOFING SYSTEMS BASED ON CHIOROSULFONATED
um62a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um62a.pdf

CONTROLLED DENSITY CELLULAR CONCRETE FLOOR FILL
um65 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um65.pdf

POLYCARBONATE PLASTIC SHEETS FOR GLAZING
um67 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um67.pdf

PARTICLEBOARD INTERIOR STATE TREADS um70b
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um70b.pdf

NIST Page on Composite Panel Association http://ts.nist.gov/Standards/scopes/1004180.htm

CARPET CUSHION um72a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um72a.pdf
Associated Laboratories, Inc. http://www.nahbrc.org/

PLASTIC BATHROOM FIXTURES um73a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um73a.pdf
RADCO, Inc. http://www.radcoinc.com/

THERMAL INSULATION, UREA-BASED, FOAMED IN PLACE um74
http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um74.pdf

CHLORINATED POLY (VINYL-CHLORIDE) CPVC AND POLYBUTHLENE (PB) HOT AND COLD
um76 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um76.pdf

CAST IRON SANITARY DRAINAGE SYSTEM WITH HUBLESS PIPE AND FITTINGS
um77a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um77a.pdf

POLYETHYLENE (PE), ACRYLONITRILE - BUTADIENE - STYRENE (ABS), POLY (VINYL
um78 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um78.pdf

ACRYLONITRILE-BUTADIENE-STYRENE (ABS) AND POLY (VINYL CHLORIDE) (PVC) PLASTIC
um79a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um79a.pdf

SPRAY APPLIED CELLULOSIC THERMAL INSULATION
um80 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um80.pdf

SEALED INSULATING GLASS UNITS
um82a http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um82a.pdf
Architectural Testing, Inc. http://www.testati.com/

SOLID FUEL TYPE ROOM HEATERS AND FIREPLACE STOVES
um84 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um84.pdf

International Conference of Building Officials http://www.iccsafe.org/
OMNI http://www.omni-test.com/
Underwriters Laboratories, Inc. http://www.ul.com/

EXTERIOR INSULATED STEEL DOOR SYSTEMS
um89 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um89.pdf

Southwest Research Institute, Inc. http://www.swri.org/

SOLAR WATER HEATING SYSTEMS
um100 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um100.pdf

Solar Rating & Certification, Inc. http://www.solar-rating.org/

EXTERIOR WALL INSULATION AND FINISH SYSTEMS
um101 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um101.pdf

RADCO, Inc. http://www.radcoinc.com/

FENESTRATION PRODUCTS (WINDOWS AND DOORS)
um111 http://www.hud.gov/offices/adm/hudclips/bulletins/umbs/um111.pdf
National Association of Home Builders http://www.nahb.org/
Architectural Testing, Inc http://www.testati.com/

5. Provide a storage tube secured to the wall in the mechanical room for on-site storage of one set of plans and specifications. These plans shall indicate any revisions made during construction to reflect the "as built" condition.

6. Two operation and maintenance manuals for all mechanical and electrical equipment shall be prepared by the project engineer and one copy shall be permanently located in the mechanical room and one copy given to the owner. All controls, valves, thermostats, etc. shall be labeled as to the proper setting. If seasonal adjustments are necessary, they shall be clearly described on the label and in the manual.

FORMS TO BE INCLUDED IN CF SPECIFICATIONS

B = These items to be submitted by each bidder as the Bid.
C = These items to be bound together with the contractor's insurance as the Contract

1. RD 1942-A, Guide 19, Attachment 1, (1-15-79) "Advertisement for Bids"
2. AIA A701-1997 "Instructions to Bidders"
3. RD 1942-A, Guide 27, Attachment 2, (8-26-98) "Attachment to AIA Document A701-1997

B 4. RD 1942-A, Guide 19, Attachment 3, (1-15-79) **"Bid"**

B 5. RD 1942-A, Guide 19, Attachment 4, (1-15-79) **"Bid Bond"**

B 6. RD 1940-Q, Exhibit A-1, (8-21-91) **"Lobbying Certification"**

B 7. RD Form 400-6, (Rev 4-00) **"Compliance Statement"**

B 8. AD-1048 (1-92) **"Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion"**

9. AIA A201-2007 "General Conditions for the Contract for Construction"
10. RD 1942-A, Guide 27, Attachment 4, (4/2011) "Attachment to AIA Document A201-2007"
11. RD 1901-E, Exhibit D, (Rev 4/2011) "Goals and Timetables for Minorities and Women"
12. RD 1942-A, Guide 19, Attachment 7, (1-15-79) "Notice of Award"

C 15. AIA A101-2007 **"Standard Form of Agreement between Owner and Contractor"**

C 16. RD 1942-A, Guide 27, Attachment 3, (4/2011) **"Attachment to AIA Document A101-2007"**

C 17. RD 1942-A, Guide 19, Attachment 6, (5-23-79) **"Payment Bond"**

C 18. RD 1942-A, Guide 19, Attachment 5, (5-23-79) **"Performance Bond"**

C 19. RD 1942-A, Guide 18, Page 7, (2-19-86) **"Certificate of Owner's Attorney"**

20. RD 1942-A, Guide 19, Attachment 8, (1-28-81) "Notice to Proceed"
21. RD Form 1924-18, (6-97) "Partial Payment Estimate"
22. RD Form 1924-7, (2-97) "Change Order"
23. Construction Sign for USDA Projects