

# CONSTRUCTION SUPERVISORS GUIDE

RURAL DEVELOPMENT SECTION 523 MUTUAL SELF-HELP HOUSING PROGRAM Construction Supervisors Guide

December 2002

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A Guide for Grantees of the USDA Section 523 Self-Help Housing Program

Developed jointly by the Self-Help Housing Technical and Management Assistance (T & MA) Contractors:

Florida Non-Profit Housing, Inc. (FNPH)

Little Dixie Community Action Agency, Inc. (LDCAA)

National Council of Agricultural Life and Labor Research Fund, Inc. (NCALL)

Rural Community Assistance Corporation (RCAC)

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Refer to the Introduction Chapter of this guide to identify the appropriate T & MA Contractor to contact for your area. After receipt of a consent and conditions letter you may copy and distribute the manual in accordance with such terms and conditions as set and approved by the T & MA Contractors.

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## INTRODUCTION

#### The Self-Help Program

Self-Help Housing is just as it sounds: Participants working together to build their own homes. This cooperative effort is a direct application of the church and barn raising techniques of the Amish and Mennonites. The participants supply the necessary labor while qualifying for mortgage financing to purchase land, materials, and subcontract work on very technical items. A private nonprofit corporation, public body, or rural town can obtain a grant from Rural Development to hire skilled staff, rent office facilities, pay for mileage, and purchase tools. This staff then works with the participants by providing the assistance and training necessary to fulfill the goals of the self-help housing program. The specifics of the program are described below.

With the assistance of the skilled staff, an association of generally 4 to 10 households is formed. (Once the grant is completed, at least 40% of the total participants served must have been very low income, 50% or less of the county median income.) They select lots, house plans, and apply for individual mortgage loans. While participants await loan approval, the group studies the responsibilities of homeownership, construction techniques, tool usage, safety, homeowner's insurance, taxes, home maintenance and money management. This time is known as the preconstruction stage.

Once the loans are approved, the group begins to build under the guidance of a skilled construction supervisor. The participants must complete a minimum of 65% of the construction labor tasks, until the group of homes is completed; usually the more technical work is subcontracted out. The construction stage lasts from 6 to 12 months, depending on the size of the group. Participants work during their spare time (evenings, weekends, and days off) so as not to interfere with the regular household employment. Rural Development loans feature interest

rates ranging from 1% to the market rate, depending on the household's adjusted annual income. The repayment period is 33 or 38 years and no down payment is required.

#### **Rural Development**

Rural Development is an agency of the United States Department of Agriculture. It was originally a credit agency for lower income farmers who could not qualify for loans elsewhere. Since the 1960's rural non-farm households have been eligible for mortgage credit. Rural Development's function as a lender is significant because private credit institutions in rural areas are relatively few in number, smaller, and often impose more rigid terms, which can be a barrier to homeownership.

The Rural Development mission is to help rural Americans improve the quality of their lives.

Rural Development helps rural communities meet their basic needs by:

- Building water and wastewater systems,
- Financing decent, affordable housing,
- Supporting electric power and rural businesses, including cooperatives, and
- Supporting community development with information and technical assistance.

Rural Development has been providing the funds for the self-help housing program since the late 1960's. They provide technical assistance grants to eligible entities to start and implement the program and they thoroughly review the preapplication and final application before a grant is awarded. When a grant is awarded, Rural Development is saying that there is a need for self-help housing in this area; this agency is suited to administer a self-help housing program; the proposed plan, budget and schedule are feasible; house plans meet local, state and Rural Development building codes; adequate building sites are available; the project ingredients are in place; and Rural Development is ready to provide the financial resources necessary to make the project work. There is no charge to participating

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groups. Grant funds provided to sponsors by Rural Development do not have to be repaid. It is an investment Rural Development is willing to make in order to see self-help housing work.

Rural Development will continue to monitor and provide oversight in the areas of

construction and administration, through quarterly meetings, construction inspections, and participant accounts throughout the term of the program.

In many cases Rural Development provides another important ingredient to the self-help program: construction/permanent financing. They are independent of private or conventional lending institutions; the financing is directly between Rural Development and the borrower. While labor and construction are group efforts, each applicant must qualify and obtain a loan directly from Rural Development.

# **Rural Development Offices**

Rural Development usually operates from four levels: national, state, area and local. The National Rural Housing Service Administrator and Associate Administrator in the National Office and the State Directors are politically appointed – all others are federal civil service employees.

#### **Rural Housing Service National Office**

The Rural Housing Service National Office is responsible for developing policy and interacts with Congress for legislation development and program funding. The National Office also obligates and monitors all Section 523 grants. The program staff at the national level maintains reports and statistics on operating self-help organizations and projected needs for funding.

#### **Rural Development State Office**

The State Office has the approval authority over the smaller Section 523 grant applications. Section 502 loans are allocated on a state-by-state basis and the State Office allocates the 502 money based on a State formula. There are additional staff members who are key to the operation of a self-help program located in many State Offices:

Rural Development State Director

Rural Housing Program Director

Rural Development State Architect

Rural Development Appraiser

Rural Development Housing Specialist

#### **Rural Development Area Office**

The Rural Development Manager is responsible for the Section 523 grant. It is his or her responsibility to ensure that the grant is operated effectively and in accordance to regulations. The Rural Development Manager will evaluate the Section 523 self-help agencies on a quarterly basis and review grant applications for new and on-going programs. In addition, Rural Development Construction Analysts are usually available through this office.

#### **Rural Development Local Office**

Within this office, the Community Development Manager is typically responsible for making the Section 502 mortgages to participating applicants of each group. He or she will be responsible for monitoring the 502 loans and will also be the co-signor on the participant checking accounts. Usually, this office does construction inspections.

#### The Rural Development Section 502 Rural Housing Loan

Many applicants that participate in the self-help housing program use Rural Development Section 502 loans to finance their homes. Section 502 loans are only available to families living in rural areas. "Rural" is defined as towns with populations of 10,000 or fewer,

and designated cities with populations between 10,000 and 20,000 in counties that are not associated with Standard Metropolitan Statistical Areas (SMSA) where a serious lack of mortgage credit exist.

In order to qualify for a Section 502 loan, prospective self-help applicants must meet Rural Development income eligibility requirements as low-income or very low-income. They must be credit-worthy, have repayment ability for the loan requested, and be unable to secure credit from other sources. The low-income measure is 80% or less of the county median income, based on family size. Very low-income is defined as 50% or less of the county median income, based on family size. These income standards, established by HUD and adopted by Rural Development, are subject to local variation and periodic change. Current information on income standards and eligibility requirements for Section 502 loans is available at Rural Development local offices.

The repayment period for the Section 502 loan is either 33 or 38 years, and the interest rate is between 1% and the current market rate. The actual rate of interest the borrower pays depends on the borrower's income, as does the loan term. If a borrower is eligible to pay less interest than the market rate, the borrower then receives a subsidy called "payment assistance". The amount of payment assistance a borrower receives is determined by the loan amount, loan period, and the household income. The assistance makes up the difference between the full loan rate and the rate the participant pays.

Section 502 funds are advanced from the Rural Development finance office in St. Louis and disbursed by the local offices based on regulatory guidelines. TA grantees prepare the drawdowns and checks for each participant's account as needed to purchase materials for different phases of construction. Note that the participant's loan payments are deferred during construction.

When all the money is withdrawn from a participant's account, Rural Development's finance office sends payment books to the participant. The participant's first loan payment is due within thirty days of termination of deferred payments. Payments then go directly to Rural Development's Centralized Servicing Center (CSC) in St. Louis.

# The 523 Mutual Self-Help Housing Technical Assistance Grant

In order to enable organizations to operate a mutual self-help housing program, Rural Development provides grant funds to operate and oversee mutual self-help housing programs. Each TA grant is usually for a period of up to two years, and is available to public and private nonprofit organizations and units of state or local government. The amount of grant funds an

organization can receive is based upon how many houses they build in a grant period. An organization can receive 15% of the average cost of a new home financed under the 502 program in their area, for every home they are planning to build.

Activities that are allowable uses of Section 523 Technical Assistance grant funds include:

- Recruiting eligible households to participate in the self-help program;
- Hold training meetings with participants on the self-help process and homeownership topics such as mortgages, insurances, taxes, and maintenance;
- Assisting participants obtain and develop building sites; obtaining or creating Rural
   Development-approved house plans and helping participants select theirs;
- Helping participants bid and select building supplies and subcontractors; train participants in construction techniques and provide construction supervision;
- Supervise participant Section 502 loan accounting, including;
  - o Totaling invoices and itemizing payments to suppliers and subcontractors;
  - o Maintaining records of deposits and withdrawals;
  - o Preparing checks (accompanied with invoices and statements).

Disallowed activities using Section 523 Technical Assistance grant funds include:

- The use of any TA funds to pay staff to provide labor on the houses;
- Purchasing any real estate or building materials for participating families;
- Paying any debts, expenses or costs which should be the responsibility of the participating families;
- Any lobbying activities as prohibited in OMB Circular A-122.

#### The T&MA Contractors

In 1979 the appropriations language was changed to authorize the use of Section 523 grant funds to contract for technical assistance to self-help grantees. There were initially six Technical and Management Assistance (T&MA) Contractors; currently there are four.

Rural Development contracts with these groups to assist operating and potential self-help housing grantees across the country. This assistance comes in the form of staff and board training, grant management, development of applications, 502 loan program, training, newsletters and conferences, among other services. These services are provided at no cost to the grantee.

#### The four contractors are:

- 1. Florida Non-Profit Housing covering Region I, the Southeast, including the states of AL, FL, GA, MS, NC, SC, TN, Puerto Rico and the Virgin Islands.
- 2. Little Dixie Community Action Agency, Inc. covering Region II, the South Central US, including the states of AR, KS, LA, MO, ND, NE, NM, OK, SD, TX, WY.
- 3. NCALL Research, Inc. covering Region III, the Northeast and Midwest, including the states of CT, DE, IA, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI, WV.
- 4. Rural Community Assistance Corporation (RCAC) covering Region IV, the Western US, including the states of AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA.

# ADDITIONAL TRAINING MATERIALS

The T&MA Contractors have produced a variety of other training materials for the purpose of assisting grantees and training grantee staff. The following is a list of the available guides. Please contact your T&MA Contractor for a copy or for more information.

#### **Board of Directors' Guide**

Board of Directors play a critical role in the success of any non-profit organization. With this in mind, this guide was designed for use by board members of any housing agency. This guide is intended primarily as a reference and not to dictate that, "this is the only way". However, it is an informational resource that may be used as a training tool and can provide new insights and a clearer understanding of nonprofit organizations, board meetings, operations, agency planning, administration of agency personnel, teamwork, orientation for new board members, federal accounting requirements, and self-help agency activities.

#### **Project Directors' Guide**

It is the responsibility of the Project Director or Executive Director to administer a successful Mutual Self-Help Housing Program. This guide should be used as an important resource to assist with that goal. It can also be used as a training manual when new staff is hired. The Project Director's Guide takes a general look at the Self-Help Program as well as providing information on required reports, program criteria, grant and financial management, personnel and fair housing.

# Guide to Basic Bookkeeping for Not-for-Profit Organizations

Understanding the basic bookkeeping procedures is just as vital to developing a not-for-profit organization as it is for a for-profit organization. Therefore, mastering the concepts of double entry bookkeeping is of much importance. Most non-profits are probably using computerized accounting software for their bookkeeping needs; however, it is still important to understand the concepts of double-entry bookkeeping. This guide will present the basic material for a not-for-profit organization's needs. With improved bookkeeping skills each organization will gain a better command of available resources and help in planning a more profitable future.

#### **Financial Management for Federally-Funded Organizations**

The purpose of this Financial Management Guide is to aid new and operating grantees with the development of financial management systems and policies that are compatible with the fiscal responsibilities set forth by the funding agency (Rural Development) and the Office of Management and Budget (OMB). While self-help housing programs that have been operating for many years may have sophisticated financial systems and policies, others are lacking written, established financial procedures that assure proper internal controls.

This Financial Management Guide offers grantees sample information, guides, and checklists for virtually all fiscal aspects of self-help housing including: Section 523 grant accounting, Section 502 participant loan accounting, establishing accounting systems, program and payroll expenditures, tax requirements, personnel records, federal accounting requirements, and audit preparation.

While this guide has been developed specifically for self-help housing grantees, the principles and information provided are applicable to any nonprofit housing development corporation utilizing federal financing or administrative funding.

#### **Guide to Accounting for Individual Borrower Loan Accounts**

In addition to establishing and maintaining an accounting system for the Section 523 grant funds, the Self-Help Housing grantee is responsible for keeping an accurate account of the disbursement of funds from the individual self-help participants' Section 502 loan accounts. Instruction 1944-I indicates that technical assistance provided by the grantee to the participants should include "providing financial supervision to individual participants with Section 502 loans, which will minimize the time and effort required by Rural Development in processing borrower expenditures for materials and contract services." In order to fulfill this accounting responsibility, the grantees must establish a record keeping system with clear procedures for handling the purchase of construction supplies, invoices from sub-contractors and vendors, and accounting for expenditures from participant loan funds. This guide provides guidelines for self-help grantees to use in designing the procedures necessary for a minimum standard of control and a system of checks and balances to protect the participants and the grantee.

# **Group Coordinator Guide**

The job duties and responsibilities of a Group Coordinator are crucial to the success of the self-help program. The Group Coordinator is the person that is responsible for locating interested participants, screening them and packaging their 502 loan application, preparing them for the construction phase and homeownership, and helping to track their progress during construction. If one of these duties is not fulfilled, the entire program is put in jeopardy.

Because the Group Coordinator often wears so many hats in a self-help agency, there are other guides that the Group Coordinator is going to need to read in addition to this one. The 502 Loan Processing Guide is crucial to the success of qualifying and processing applicants, the Preconstruction Meetings Guide will help guide the Group Coordinator through these meetings, and the SHARES Manual will instruct the Group Coordinator on the task of entering information into the SHARES database.

This guide will help the Group Coordinator in the areas of recruitment, communication, forming a group, group management, motivation, and money management.

## 502 Loan Processing Guide

(This guide is currently under development.)

While the labor and construction is a group effort, each participant must qualify and obtain a loan individually from Rural Development. In order to qualify, a household must fall within the income guidelines set by Rural Development, must have demonstrated repayment ability, must have a good credit rating, and should have a low debt load. Because the 502 self-help loan process can be complicated for the individual, the technical assistance staff will pre-screen participants for program eligibility and prepare the application packages for Rural Development.

The 502 Loan Processing Guide will help to train the Group Coordinator or appropriate staff person in packaging these loans. The loan terms, application forms, credit reports, and the additional documentation required are all covered.

# **Preconstruction Meetings Guide**

(This guide is currently under development.)

Each self-help grantee is responsible for organizing participants into groups, which remain together from loan processing through construction. The organization of participants into groups reinforces the "mutual" aspect of the self-help program because participants within a group are expected to work on each other's house until all houses in the group are completed. In addition to organizing participants into groups, self-help programs are responsible for explaining the self-help concept and methodology to participants, and for educating participants about their responsibilities as self-help participants, 502 loan borrowers, and homeowners. This is achieved through a series of "preconstruction meetings".

Group meetings provide self-help grantees, Rural Development, and the self-help participants with an opportunity to develop bonds which can contribute to the timely construction of houses – of which all can be proud – and which can place participants on a sound footing for assuming their homeownership responsibilities.

The information and materials contained in this guide are presented as informational resources, ready to use formats, or samples to be modified to suite each grantee's circumstances.

# **SHARES Help Manual**

SHARES stands for the Self-Help Automated Reporting and Evaluation System. It is an internet-ready application designed to manage, track, evaluate, and report on the status of the self-help program, as well as share this information with all parties that provide assistance to this program.

The SHARES Help Manual describes all aspects of the SHARES program, such as, getting started, the available screens, entering information, and printing reports.

#### **GENERAL OVERVIEW**

The construction supervisor is an integral part of a successful housing agency's self-help program. To be successful, the construction supervisor needs to understand:

- How the Rural Development's self-help program works;
- How Your agency operates their program with Rural Development;
- The concepts and practices of Construction Management; and
- How the construction supervisor assists the program.

This guide describes a typical Rural Development Section 523 self-help grantee's program with emphasis on the role of the construction supervisor and construction management techniques. It is intended to serve as a general reference manual that will describe the self-help program and suggest methods for maintaining controls on the program. This guide will provide the construction supervisor with important concepts and tools needed to solve problems, formulating solutions to potential problems, and help avoid them all together, by assisting to draw upon experience.

The construction supervisor's role in the self-help construction process is to assist members of participating families (the group) in the construction of their houses. This will include both technical assistance and training. There are many aspects of the Construction Supervisors role that make it difficult. And for that reason, this information will provide the construction supervisor an understanding and be capable to answer questions on general program operations.

This guide has been designed with easy references, appendix and suggested ways of handling the role of construction supervisor and your construction management techniques.

Good Luck!

# STAFFING A SELF-HELP AGENCY

There are many factors that determine the staffing patterns of a self-help agency, based on the size and nature of the organization. Typically a minimum staff of four is considered for small or new operations. The positions could be an executive director or project director, a group recruiter, a secretary/bookkeeper, and a construction supervisor. As agencies grow, the responsibilities of these positions can be spread among other staff members or to whole departments.

#### **Executive Director**

The executive director can have the following general responsibilities:

- Running the agency
- Administering the self-help program
- Hiring and supervising the staff

The executive director is hired and supervised by the board of directors, and is the primary or direct contact person for the board of directors.

and/or

# **Project Director / Housing Director**

The project director may or can be responsible for the day-to-day operations of the self-help housing program. This position will be a direct contact for the Rural Development agency and will be responsible for handling the reporting requirements. In addition to this the project director can be responsible for the following:

- Assist in hiring the self-help staff
- Be the contact person for the executive director
- Supervise and evaluate the self-help staff

Depending on the size of the agency, the project director may have a supervisor between them and the executive director.

#### **Group Coordinator**

The group coordinator (recruiter, loan packager), by definition, has two primary functions:

- Direct the agency's pre-construction phase, recruitment
- Prepare and submit loan dockets to the Rural Development county office

The group coordinator typically does most of the family recruiting, even though other staff members can share this task.

The self-help group coordinator's duties generally include:

- Outreach and public relations campaigns
- Screening applicants for interest in and eligibility for the program
- Coordinating pre-construction meetings
- Completing and filing loan applications with Rural Development
- 1. SHARES reporting

#### Bookkeeper

The bookkeeper (secretary) also has a dual job description:

- General secretarial duties of a small, independent office
- Could handle the Section 523 grant funds:
  - Bill paying
  - Maintain financial books of record
  - Monthly, quarterly and annual financial reports
  - May maintain family 502 accounts
  - 1. SHARES reporting

## **Construction Supervisor / Construction Manager / Construction Coordinator**

The construction supervisor is responsible for training and guiding the participants through the construction of their mutual self-help houses. The construction supervisor does not build houses for the families. The construction supervisor shows the families how to handle the tasks necessary to construct their own homes.

The construction supervisor cooperates with other staff members and **may** be responsible for all or some of the following operations:

- Assists in the site selection process
- Assists during the pre-construction family meetings
- Prepares accurate estimates of the construction costs
- Develops contracts for subcontractors and price guarantees with suppliers
- Maintain field records and accounts
- Trains the group in construction methods
- Supervises the project and attempts to keep it on schedule

#### GENERAL PROGRAM EXPECTATIONS

It cannot be overemphasized that good communication with and relations between Rural Development and the grantee are vital to the current and continued success of the program. This is a relationship that benefits from preventing surprises. It is necessary that the self-help agency staff know both what to expect from, and what to provide the Rural Development officials with whom they interact. Having a daily or weekly "debriefing" session is recommended.

#### What Rural Development Expects of the Self-Help Agency

Self-Help agency performance is measured by four measurable factors:

- The number of houses built
- The technical assistance (TA) cost per house (unit)
- The amount of family labor contribution
- The percentage of very-low income participants served

Performance guidelines are all based on the goals set out in the self-help agency's current grant application. Agency adherence to these performance-based factors is extremely important to Rural Development.

Successful program management and good relations with Rural Development are used to review a self-help agency.

Among the more frequently discussed factors are:

- Maintaining accurate financial records
- Operating within Rural Development guidelines
- Maintaining a good level of recruiting
- Building activity
- Successful screening of applicants
- Good, clear communications

All of these are program components that Rural Development wants to see in an agency.

# What the Self-Help Agency Should Expect from Rural Development

Rural Development has designed a very "workable" program for self-help housing. The self-help program is a comprehensive package, which includes:

- Administration grants to organizations running self-help programs
- Affordable construction and mortgage loans
- Provisions for technical assistance (Regional T&MA Contractors)
- Many Rural Development offices for convenience in making loans

The agency can expect to receive ongoing assistance throughout its program from Rural Development and the T&MA Contractor. In addition to support from the four levels of Rural Development, the agency can turn to the T&MA Contractor that evaluates, monitors and supports the self-help program. The majority of the assistance provided by each source to self-help agencies is for staff development and program management.

# ROLES AND RESPONSIBILITIES OF THE CONSTRUCTION SUPERVISOR

This staff position is one of the most important to a self-help grant program. The success of the timely and appropriate construction of a group of houses can be tied directly to the professionalism of the construction supervisor. This staff person must be skilled in construction methods, terminology, materials, applications of those materials, and be knowledgeable of codes, regulations, and building requirements of Rural Development (RD). This person must be a teacher, inspector, supervisor, counselor, troubleshooter, and act as a foreman throughout the building process of a group of houses.

The Construction Supervisor is responsible for, but not limited to:

- 1. Assuring that all of the houses are constructed according to plans and specifications in a workmanlike manner so that each house passes all inspections (local and Rural Development).
- 2. Prepares accurate estimates of construction costs.
- 3. Develops contracts for subcontractors and suppliers.
- 4. Coordinating all family labor and subcontractor work.
- Maintaining construction progress according to the Housing Development Plan (HDP).
- 6. The safety of all people on the job site.

It is <u>not</u> the construction supervisor's job to build the houses, but to train and supervise the participating families in building their own houses. The following items suggest ways for the construction supervisor to accomplish these challenging tasks.

- 1. Should be able to adjust their working schedule to the times most convenient for the self-help participants to work, which is usually evenings and weekends.
- 2. Keep friendly and productive working relationships between themselves and the group.
- 3. Should be fair and impartial in assigning jobs to participants.
- 4. Keeping detailed and accurate records of owner labor is very important in avoiding disputes.
- 5. Making sure that material of the proper quality, quantity, and type are at the job site when needed and that work will not be delayed.
- 6. Examine all materials as they are unloaded to assure the correct quantity, type, and quality of materials being delivered.

# CONSTRUCTION MANAGEMENT

#### CONSTRUCTION SPECIFICATIONS

Specifications will be necessary for many phases of the construction process (site development, house plans, material supply, and subcontractors). The construction supervisor oversees, and in some cases writes the construction specifications (RD Form 1924-2, Descriptions of Materials). An engineer typically writes the site development specifications.

The definition of a good construction specification is one that is simple, clear, and complete as possible. Construction specifications need to be concise. A specification must be detailed enough to explain the specific step or material in the construction process. The information must eliminate any degree of confusion or misinterpretation. This is especially important when the agency subcontracts for labor and orders materials for the task.

The following items need to be taken into consideration when developing good construction specifications.

- Who is going to do it?
- What construction standard or code is used?
- What materials or equivalents will be used?
- What type and term of warranty is required?
- Specific brand or model to be used as basis for comparison
- Describing the method of installation
- Describing the specific quantity: square feet, cubic yards, etc
- Describing the quality of product: size, style, model number

#### **Specification Types:**

There are five types of specifications generally used in the construction trades: technical, performance, reference, brand name, and other proprietary specifications. The construction supervisor should understand the uses of and differences between these various types of specifications.

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#### **Technical Specifications:**

A technical specification is the generally accepted standard for construction specifications. It is considered best because it completely details the exact need or condition to be met. It requires the construction supervisor to account for every detail leaving little if nothing to chance. The challenge is to have a construction supervisor who is familiar with every detail of the construction process.

#### **Performance Specifications:**

A performance specification is the second most common construction specification. It describes the finished work or product in relation to a distinct measurable standard. The clear advantage of this specification is that it allows you to write about criteria you want met without knowing the exact method required to meet it. You simply specify the end result.

#### **Reference Standard Specifications:**

A reference standard refers to a generally accepted standard. It should only be used as an adjunct to another specification. Generally, it will call out a testing standard, building code or trade association recommendation for the use and installation of a particular material or process.

# **Brand Name Specifications:**

Brand name specifications (proprietary specifications) are simple to write. They require that the construction supervisor specify a product to be used and its standards. This will be written in such a way that the manufacturers' guarantees are preserved. This written specification allows the construction supervisor to exercise control over the product and the construction process. It can eliminate most of the guesswork and be easier to inspect for compliance.

#### **Other Proprietary Specifications:**

There are a variety of alternative forms that the proprietary, or brand name specifications can take. Among them are the following:

#### **Base Bid**

- A base bid specification is written with only one brand for each required construction material or equipment.
- There are no substitutes allowed.

#### **Base Bid With Requested Alternatives**

- Same as base bid, however, the specification requests alternative bids using predetermined acceptable material or equipment.
- In the bid, the contractor or supplier must show the credit or additional cost that each alternative item could cause.

# Two Types of Instructions for Building a Home

Always remember that there are two types of instructions for building a home, written and graphic: the graphics being the blueprints or plan and the written portion being the specifications or "specs". If ever in doubt, the specifications take precedence over the drawings. When specs are completed and prepared for each family, the family should initial each page and sign the last page, signifying that they have read and have had each section explained to them.

# **Description of Materials (Form RD 1924-2)**

For the purposes of Self-Help housing the "Description of Materials" form RD 1924-2 will be used for the specification sheet. Each section is clearly labeled, make sure your form has been reviewed and clarified with the house plan, because if anything is unclear, the spec sheet is the one that should and will be followed. Rural Development requires a Description of Materials (spec sheet), a cost estimate and a house plan for each family docket submission. If either of these items is missing then it may hold up the application process.

#### **Change Orders**

As a construction supervisor you are responsible to manage all aspects of the homes you are responsible to oversee being built. Changes to any portion of the homes whether there is a cost involved or not is considered a change order. Any structural, mechanical or material change to the original plans and specs are considered a change. The common practice for a Mutual self-help Home is a ZERO change order home. No changes are allowed to these homes whatsoever. The families need to understand that they have agreed to build their homes as per approved plans and specifications. Any additions or changes they wish to make may be done once they have moved into their home.

In reality changes will occur and when they do a process should occur to inform all interested parties of the change. Each Grantee should establish an internal process, which they would like their Construction Supervisor to follow. Then there is the Rural Development process and the proper change order forms must be utilized for documentation purposes.

Following is a step-by-step process in which you may consider to process a change order:

- 1. Construction Supervisor identifies the change and prepares a field change order.
- The field change order is not performed until authorized by the SH Program Manager.
- The SH Program Manager will discuss and review the request and formalize the request by filling out the RD Change Order Request form.
- The SH Program Manager should contact their RD representative and discuss the CO request and request to proceed with the change. (So production may continue)
- The SH Program Manager will immediately submit the forms to RD for their approval.

# **HOUSE PLANS**

Obtaining suitable house plans for your self-help project can be a laborious task, but it does not have to be.

#### **Standardized Plans**

The agency will find that using standard plans offering prescribed variations of square footage, bedrooms, and bathrooms, and exterior style will make its job much easier. (The alternative is to assist each applicant to design his or her dream house.) Computer-aided drafting (CAD) may be an alternative to larger agencies to support developing plans. It can also assist in fitting house designs on odd-shaped lots. Smaller agencies might have to contract out the design of house plans or order out of house plan books. It is recommended that you visit your local Rural Development office and ask to review current house plans of homes built in the area.

#### **Plan Availability**

One of the most common questions in the self-help housing program is "Where can I find acceptable house plans?" The answer is a variety of places, the local Rural Development office, your T&MA Contractor, and other self-help agencies. If these areas do not produce any benefits, there are building supply centers that sell a wide range of house plans through books. This can be a very expensive source for new self-help agencies. When choosing house plans remember to select plans that will not need changes. The final source is through a local architect; this can also be very expensive and time consuming.

#### **House Plan Amenities**

The house plans will vary in size and design in order to accommodate the families. We must always keep in mind that each home should fit a definition of modest housing. Rural Development is a lender of last resort, and therefore should not be serving families that could afford to build in a conventional market. Rural Development has adopted a guideline for maintaining that the houses in this program are to be modest in design. Financed dwellings cannot exceed the maximum dollar limitation established by Rural Development for the area in which the property is located. Furthermore, dwellings cannot be approved with in-ground pools or structures designed for income-producing facilities or purposes. It is always recommended to check with your Rural Development office for guidance.

#### **House Plan Cost**

As with everything else in today's market, prices seem to keep rising, no different with the cost of house plans. Remember to beware of copyright infringement on all of these options. House plans must be certified and Rural Development requires this certification with all plans. Let's start with the cheaper side and work our way to the more costly.

#### **Reasonable Costs:**

- Borrow or pay a nominal fee to an operating grantee near you.

  (Range from \$0 \$200)
- Check with Regional T&MA Contractor for plans that they might have available.
   (Range from \$0 \$200)
- Check with the local Rural Development Office, for recent contractor built plans
  that may be available, or a contractor name and phone number so you can make
  the contact directly.

(Range from \$0 - \$300)

# **Higher Costs:**

• Building suppliers may carry their own house plan book. Many lumber companies carry a modest or affordable design house plan book. The plans are usually very complete and many times you can pay extra for an engineer in your state to certify the plans for Rural Development.

(Range from \$350 - \$1,000)

• Check with a local architect and see if he would design a couple of models for your families. Always ask for a discount or donation, it could reduce the cost of this process significantly. This is probably the last resort and definitely the most expensive. (Range from \$1,000 - \$2,000 per plan mode)

# **CONSTRUCTION ESTIMATING**

#### Introduction

Construction estimating is an analysis of many items that influence and contribute to the cost of a project. Construction estimating serves a variety of purposes; much of the credit for the success or failure of a project can be attributed to the skill, or lack of, in its estimating staff. For our purpose in construction estimating, we need to account for *every* item that is needed in the project. Because of this, construction knowledge is very important. Every possible material item should be considered and or listed so that it can be properly priced.

One of the primary responsibilities assumed by the self-help grantee is the accurate and Accountable disbursement of the 502 loan funds. One of the areas in which many self-help programs get into trouble is in accurately estimating the cost of construction in the self-help program. Accurate cost control and accounting are dependent upon consistent and thorough cost estimating. Any grantee which does not accurately estimate the cost of construction in the program, thereby forcing a low-income family to seek a second, "supplemental" mortgage loan to pay the increased cost of building a house, has not only failed to live up to the bargain made with the participants, but has also jeopardized the family's ability to repay the mortgage to Rural Development.

# **Other Estimating Procedures**

There are many systems for construction estimating, some quick and easy, some more time consuming. The fact is that the quick and easy methods are not very accurate and usually require years of construction experience and a good sense of intuition to even approach a reasonable level of accuracy. The quickest method (and least dependable) is the "rule of thumb" or cost per square foot method. Several companies publish per square foot figures for many types of construction and several levels of quality (i.e., average, good, better, best). One only has to multiply the area of the house by the appropriate cost per square foot to arrive at "rule of thumb" estimates for a whole house. These "per square foot" figures are not designed for self-help construction, and should *never* be used to estimate the cost of a self-help house.

#### **Recommended Estimating Process**

The recommended method of construction estimating requires a detailed analysis of the proposed house. Construction Supervisors should perform quantity take-offs, which will list the actual quantity of every item needed to build the house based on the "Description of Materials". Once complete, the individual items should be compiled and summarized onto a "Cost Estimate Summary" form which will also include all subcontracted tasks, lot costs, permits, fees and all other applicable information. Construction Supervisors must prepare a separate Cost Estimate Summary for each participant. Grantees should strive for price guarantees on all building materials, and subcontracted labor. Building suppliers do not like to guarantee pricing, but if you are a good negotiator the supplier should concede on that issue in order to get the business. When estimating materials to be used always remember that the most current codes are considered. Check with the local Rural Development Office to find out which building codes they enforce, along with your local, and state building codes.

#### **Dwelling Requirements**

Dwellings financed under the 502 loan for the self-help housing program must provide modest, decent, safe and sanitary housing. Dwelling financed cannot exceed the maximum dollar limitation established by Rural Development for the area in which the property is located. Furthermore, dwellings cannot be approved with in-ground pools or structures designed for income-producing facilities or purposes. It is always recommended to check with your local Rural Development office for guidance.

# **Summary**

Construction estimating is not something that should be taken lightly; much emphasis should be placed on accurately pricing a house.

#### **Mutual Concept**

Mutual self-help is the method by which participating families organized in groups generally of 4 to 10 families utilize their own labor to reduce the total construction cost of their home by an exchange of labor with one another.

Administrative Notice (AN) # 3449, Subject: Mutual Self-Help Housing Program Family

Labor contribution, which had the purpose of clarifying acceptable contributions of labor by families in the construction of their homes under the Mutual Self-Help Housing program. "The current self-help regulation does not detail what is actually involved in performing specific tasks resulting in many interpretations of the labor that must be completed to earn the credit percentage assigned to a particular task. Clarification is needed to assure that applicants are made fully aware of the tasks that will be expected of them to meet the requirement of at least 65 percent of the actual labor to build their homes. Exhibit B-2 of RD Instruction 1944-I (see appendix) provides a breakdown of construction development for determining percentages of construction completed. To earn the percentage assigned to a particular task, families are required to perform the work as specified. They must complete a significant portion of the actual work associated with the task to receive the designated credit percentage. Unpacking materials, hauling trash or cleaning up after the task is completed does not constitute acceptable labor contribution."

## RECOMMENDED ACCEPTABLE AND UNACCEPTABLE ACTIVITIES ON THE JOB SITE

The Construction Supervisor should make sure that all person's (family members, self-help staff members, contractors, etc.) involved in the construction process follow these procedures:

- Children under pre-specified age should not be allowed at the job site during construction.
- A practical dress code should be followed (any clothing that could be considered disruptive or unsafe should not be allowed).
- Friends and relatives of a participant visiting the self-help job site while construction is in progress should be supervised.
- Biased, inflammatory or lewd language, sexual harassment, or physical abuse will not be tolerated on the job site.
- The use of alcohol or any controlled substances will not be allowed on the job site.

#### **CONSTRUCTION SAFETY**

The construction supervisor is the first line of defense against accidents and injuries on the job sites. The construction supervisor not only trains the group in tool use and construction methods, but how to use and perform them safely. The construction supervisor should design safety training for the group to fully develop the skills necessary to safely use construction tools. The training should not only include the correct methods of tool use but must cover general tool maintenance (e.g. cleaning saws, securing ladders, extension cords and tool storage).

The construction supervisor should maintain a safe job site during construction. He or she will need to develop an intuitive sense for what's not right with the job site and be prepared to correct each problem as it arises. During pre-construction meetings and at least monthly during construction, the construction supervisor should discuss job-site safety with the group. Safety discussions should include hazards peculiar to the upcoming phase of construction, any problems that need to be corrected and reminders on proper use of tools. In addition, the construction supervisor should routinely maintain first-aid supplies weekly, and continuously check the job site for debris and hazards.

The self-help agency and/or construction supervisors should be responsible for developing a safety checklist that can be used to perform on site safety inspections. Please refer to Appendix for a model self-help agency safety checklist.

#### **Safety Guidelines**

The self-help agency and the construction supervisor should develop safety guidelines and procedures to follow in the event of an accident or an emergency on the job site. A safety plan should be put into place and rehearsed regularly as part of pre-construction meeting or on site safety meetings. Participants must have a clear understanding of their role in the unlikely event of an accident or emergency.

Practical knowledge of general first-aid and emergency assistance should be a part of the construction supervisor's training. Many areas have service organizations (American Red Cross, YMCA and YWCA), which train individuals in first-aid, CPR and safety in the workplace. In your area, check your yellow pages under the following headings: first-aid instruction, first aid supplies, safety equipment and safety consultants along with the above mentioned organizations.

#### **Emergency Phone Numbers**

The self-help agency and the construction supervisor must maintain a list of telephone numbers in the event of an emergency. This list must be readily accessible. Construction supervisors only need a minimal emergency telephone number list; they will not have a lot of time other than to a hospital or for an ambulance. However the agency should maintain a complete list of phone numbers for each group member during construction. Important numbers would be children's schools, family church, family doctor, babysitter, nearest relative, etc. Each agency must provide the construction supervisor with an accurate and up-to-date list of Emergency Phone Numbers. This list must be appropriate for each project the construction supervisor oversees. For example, if the project is composed of scattered sites, the information provided must take into account the distance to the nearest facility.

For a sample Emergency Phone Number listing refer to Appendix

#### Reporting an Accident

The self-help agency must develop a clear, easy to follow instruction for reporting an accident. In addition the agency must determine what the construction supervisor should do until emergency help arrives. It should be a requirement of the agency that the construction supervisor have knowledge of basic first-aid, to include, treating burns, cuts, apply tourniquet, shock, CPR and treatment of venomous bites. Not all accidents and reporting will be the same. For example, two potential situations which may require different accident reports are a group member's car is hit while on the way to the hardware store or a material supplier's truck hits a temporary electric pole. The procedures will be different for each accident, whether it involves the group members, the self-help agency or anyone else. Construction Supervisors should have a general knowledge of agency liability. Each self-help agency needs a firm policy and procedure for reporting any accident. An example of an Accident Report is in Appendix.

- Identify the issues of safety and liability during the planning stages.
- Job site safety is the responsibility of the Construction Supervisor.
- A proper understanding of tool use and safety, tool maintenance, and construction
   Techniques must be developed during the pre-construction meetings and reinforced during construction.

#### **INSPECTORS**

#### **Working with Inspectors**

Building inspectors should be treated with courtesy and respect. The Construction Supervisor must encourage the group to respect the inspector when they are on the job site.

Building inspectors are generally fair, but often overworked individuals, who will treat you with the same level of respect that you give them. Blatantly showing this respect could save you frustration and delays.

REMEMBER: Respect from you now may save you from frustration and delay.

When a building inspector arrives at the job site:

- Stop what you are doing.
- Be gracious in your greeting.
- Explain what you are doing that day.
- Direct the inspector to the specific house/houses to be inspected.

REMEMBER: A job site should always be clear of debris and hazards, especially during an inspection.

The Construction Supervisor should accompany the inspector while the inspection is in progress. By doing this you can discuss the construction techniques used or simply listen to the inspector's "small talk". Keep in mind that building inspectors often have a wealth of information that they are often quite willing to share.

#### **How to Prepare for the Inspection**

The construction supervisor needs to smooth out the inspection process:

- Have the phase to be inspected completed and ready for inspection.
- Have the inspection time and date confirmed.
- Have all needed forms filled out, signed and available.
- Ask for the name of the inspector so you can address them personally.

• Have the job site clear of debris.

The inspection will fall into two categories:

- Inspections by local building officials.
- Inspections by the Rural Development office.

#### **Local Inspections**

Self-Help agencies, generally, will have all of the construction inspected first by the local city and county building inspector; although in some regions, a separate state and federal inspection may be required. Also, fire, school, and utility districts, county engineers and special districts sometimes require additional inspections.

These inspections are performed in a specific order and will determine whether the house's construction and location on the site (i.e., setbacks) are in compliance with local codes and ordinances. To avoid unnecessary delays, not to mention the embarrassment and added costs, it is extremely important that the construction supervisor meet with the local building inspector before each construction project begins.

NOTE: It is not uncommon to find that inspectors are fanatical when it comes to some minor construction practice, such as:

- Framing windows and doors.
- Alternatives to the "4 X 12" header.
- Nailing patterns on siding and plywood's.
- Cement surface finishing.

#### **Rural Development Construction Inspections**

The Rural Development inspections are meant to observe the project's progress, and to assure the Rural Development staff that the project:

- Is built to the Rural Development approved plans.
- Is progressing on schedule.
- Will pass final Rural Development inspection.

NOTE: These inspections are similar to a conventional bank's inspection; Rural Development is concerned that its investment is secure.

REMEMBER: Never allow a Rural Development inspection to occur without the presence of the construction supervisor or a representative of the self-help agency on the site. This is absolutely essential to maintain control of the group.

MAINTAIN A GOOD RELATIONSHIP WITH RURAL

**DEVELOPMENT** 

The agency staff must work towards maintaining good communications with Rural

Development. This is especially true of the construction supervisor. The construction supervisor, as

the agency's field representative, must maintain and promote good relations with Rural Development

officials in the field. This will not always be easy. Any complaints with a Rural Development official,

no matter how well founded must be taken through proper channels.

NOTE:

Under no circumstances should the construction supervisor directly step into a

potential volatile situation with a Rural Development official.

A Construction Supervisor's Rules of Professional Behavior

Know the self-help program procedures

Do not complain about Rural Development procedures

Never criticize a Rural Development official's actions in front of the group

Never harass a Rural Development official

Never lose your temper with a group member

The construction supervisor must direct all complaints with a Rural Development Office and

other government officials through the self-help agency. In addition, when a problem arises on the job

site that the construction supervisor cannot resolve, it needs to be directed to the self-help agency. The

self-help agency should provide the construction supervisor with direction as to the procedure to

follow in documenting and reporting problems and complaints. To resolve a problem, document and

report it.

REMEMBER:

The project's success depends on your tact and good sense every day,

but especially in a crisis.

The project's supervision requires attention to detail and timing. The construction supervisor may assist in and direct the following tasks:

- Maintaining records of family labor contributions and commitments.
- Project scheduling, charts and checklists.
- Material take-offs and cost estimates.
- Bids and contract for material and subcontracted services.
- Preparing purchase orders and ordering materials.
- Material-handling and bill-paying procedures.
- Report preparation and record keeping.

REMEMBER: The construction supervisor has the greatest responsibility for the project's success.

#### **Group Supervision**

With a few exceptions, the group members will probably have little or no construction experience. Often, any experience that a member of the group has will be outdated or simply wrong. Retraining an individual often requires as much or more effort than training complete novices. (When you do find that you have an individual with some experience, be very cautious of how you determine the quality of that person's expertise.)

The group members are not employees (neither the agency's nor the construction supervisor's), and can seldom be supervised in the same way construction workers on a commercial job are.

Supervising nonskilled participants is often the most difficult task facing the construction supervisor. Gaining the group's cooperation, respect and trust is not always easy. In addition, getting consistent, good quality work from the participants - while avoiding conflicts among them - is also a challenge.

REMEMBER: The construction supervisor must develop communication skills necessary to motivate, persuade and train.

#### **QUALITY CONTROL**

The construction supervisor must remember that the goal of self-help housing programs is housing. To this end, the construction supervisor's role is to train and guide the group members in the construction of their houses.

NOTE: Implicit in the above statement is the following assumption: The housing produced by the group members will ultimately pass both the local jurisdiction's and Rural Development final inspections.

To ensure the Rural Development housing standards are met, the construction supervisor must:

- Assist the group to produce quality housing
- Adhere to the approved house plans and specifications

The construction supervisor must know the local building code, the Uniform Building Code, the MEC (Model Energy Code), Rural Development construction guidelines and the generally accepted methods of residential construction. More important than knowing and understanding the theory, the construction supervisor must be able to demonstrate these principles and enforce adherence.

#### The Project Diary

The construction supervisor should maintain a project diary. A project diary includes a brief description of each day's important events, such as: material delivered, subcontractor's work, any problems and their solutions, houses worked on and their progress and inspections and their outcome.

The diary should record details of any conversations the construction supervisor has with inspectors, subcontractors or suppliers. The recorded detail should include at least the following facts: date and time, name and agency, reason, etc.

In addition, the project diary is used to maintain a record of complaints and disputes among the group, or with suppliers and subcontractors and with inspectors and Rural Development. It is also a good idea to keep a record of the names of any visitors to the job site in this diary.

REMEMBER: Record your observations and comments regarding any dispute at the job site in your project diary. Be sure to transfer the information to the agency's permanent files.

#### **Keeping Organized**

The construction supervisor will assist the other agency staff members to develop a system that can organize, control and direct the constant paper flow through the self-help program. A construction supervisor's filing system has three functions:

- To maintain delivery receipts for materials
- To organize house plans, permits and inspections
- To update the group's progress reports

#### **Maintaining Delivery Receipts for Materials**

The quantity of receipts accumulated by the construction supervisor at the job site will vary throughout the project; but there will always be some items that will be lost that need to be kept and recorded. Each agency must devise a filing system for the field office that bridges the gap (and distances) between the bookkeeper and the construction supervisor for managing the individual billings to the family accounts. Methods that construction supervisors use to reduce this source of headaches are as numerous as there are construction supervisors.

The following are some examples of filing systems for the construction supervisor:

- Separate receipts by family
- Turn them into the office weekly

NOTE: The daily receipts for and the delivery receipts for materials with purchase orders must get to the bookkeeper as soon as possible. The key to a bill paying system is paying accounts quickly to capture any discounts offered. The receipts for materials and records must also be legible.

- Do not use purchase orders as napkins or desk blotters.
- Do not keep receipts in your back pocket or above your pickup's visor.
- Do not spindle them on a 16d nail in a stud or temporary power pole.
- Devise a day-to-day filing system that works for you.

#### **Organize House Plans, Permits and Inspections**

The construction supervisor needs a field copy of each different house plan in the project. In addition, the construction supervisor should have a copy of the following plans:

- Site plans grading and drainage, utility, off-site improvements, curbs and gutter, street and landscaping.
- A copy of all of the specifications for each plan.

NOTE: Having a copy of these various plans and specifications at the field office is critical when the project is located at an inconvenient distance from your agency's main office. In addition, the field office must have the original building permits for each building site. These need to be kept in a safe place and in good condition.

#### **A Comprehensive Filing System**

The construction supervisor needs a comprehensive filing system to maintain the general records of the group and the project. This file should contain a record of each family (family data, emergency contacts), and each family's house (lot number, house plans, colors, and finish specifications).

The construction supervisor should also maintain field construction progress records. These records will ultimately be used by the agency to update its progress reports for Rural Development Quarterly Reviews and their reports. Specifically, the construction supervisor uses an equivalent unit (EU) checklist to update the Rural Development report and update the completion schedule.

#### The Field Office

Some self-help agencies have set up a field office for the construction supervisor to reduce the problems associated with maintaining records, files, and plans at the job site. An office can be easily created in a small trailer or can be built on site by the agency. The unit should be large enough for a desk, house plan file and a file cabinet. About one hundred square feet is usually enough. The field office needs to be secure, weather tight, preferably equipped with heat, air conditioning, electric and a

telephone. In addition to being used as an office, these units are often used to store some of the expensive equipment and building materials.

#### **References:**

- Description of Materials (Form RD 1924-2)
- Change Order
- Sub (bidding)

#### SELECTING THE RIGHT SUBCONTRACTOR

The grantee and participant together are responsible for obtaining bids and referrals from subcontractors. In most cases the grantee will coordinate all of the work involved in receiving the bids and referrals and then will relay the information to the participants to determine who is the low bidder and if the bidder is credible. The grantee should not be confused as being a general contractor; their acting role is just as a coordinator, organizer, and advisor to the participants.

Before the bidding process can even start, the grantee or the participant must provide the subcontractors, that are going to be bidding the job, a complete copy of the blueprints and specifications and any other data involved in the subcontracted task. For competitive bidding to be a valid procedure, all competitors must bid under exactly the same conditions for an identical package of work. There are not any laws stating that certain contractors cannot perform specified work other than having the proper license. So be very careful in qualifying a subcontractor by local directories.

After obtaining bids from potential subcontractors, the grantee should schedule interviews with them to determine their quality of performance and background. Make sure references are acquired from other jobs that similar work was performed. Once a subcontractor is selected, each self-help family must sign a construction contract with each subcontractor. Example: FmHA Form 1924-6 "Construction Contract". The contract should also list the grantee's requirements that the subcontractor must comply with and specify what conditions under which payment may be withheld or another contractor substituted.

After examining the drawings and specifications, some subcontractors may want to visit the jobsite. When submitting a task for bid to subcontractors, always tell them the location, availability of electric, water, telephone, local ordinances, storage of equipment, delivery information, topography and drainage, etc. Give subcontractors access to all available information concerning the project. Always make sure that you give the subcontractor a firm date by which you need the bid. All too often subcontractors wait until the last minute before giving an estimate. Make sure the subcontractor is aware of the length of the project so they can guarantee pricing accordingly.

The subcontractors' work should be inspected carefully. Errors or changes can be handled with little trouble and time if dealt with right away. Subcontractors are sometimes requested by owner/builders to grant extensions of the acceptance time. The subcontractor is generally willing to oblige, but sometimes in its eagerness to get the job they will agree to such an extension without giving the matter sufficient consideration. Such action means that the completion date of the project will be

set back by a length of time equal to the extension of the acceptance period. Due to increased wage and material costs a subcontractor may not be willing to extend the original acceptance period. When increased costs are anticipated and the subcontractor does not wish to absorb them, they should quote the required additional amount in exchange for extending the acceptance period.

Problems with subcontractors usually evolve from lack of communication. Make sure that contracts and payment schedules have been clearly defined. If the subcontractor is not fulfilling the contract or the work is poor quality and all attempts to work things out have failed then you have no choice but to release the subcontractor from the job. Hopefully having to terminate a subcontractor is the last resort, particularly since replacing them after work has begun can be even more difficult. Obtaining bids and choosing the right subcontractor can be quite an experience. Good preparation is the answer to a successful project.

#### **Construction Planning & Scheduling**

Time is an important aspect of job control. If a construction project is to proceed efficiently and be completed within the contract time, the work must be carefully planned and scheduled in advance. Construction projects are complex, and a large job will involve literally thousands of separate operations. If these tasks were to follow one another in single file order, job planning and scheduling would be relatively simple, but this is not the case. Each operation has its own time requirements, and its start depends on the completion of certain proceeding operations. At the same time, many tasks are independent of one another and can be carried out simultaneously. Thus a typical construction project involves many mutually dependent and interrelated operations that in total combination comprise a tangled web of individual time and sequential relationships. When individual task requirements of materials, equipment and labor are superimposed, it becomes obvious that project planning and scheduling are very complicated and difficult management functions.

The traditional basis for the planning and scheduling of construction projects has been the bar chart. Admittedly, this graphical representation of work versus time is a useful and convenient device for depicting an established schedule of construction operations and recording its progress. The bar chart is very useful. Its unsurpassed visual clarity makes it a very valuable medium for displaying job schedule information. It is immediately intelligible to people who have no knowledge of CPM (Critical Path Method), or network diagrams. It affords an easy and convenient way in which to monitor job progress, check delivery of materials, schedule equipment and crews, and record project advancement.

For these reasons, bar charts will undoubtedly continue to be widely used in the construction industry. Conventional bar charts can be quickly derived from a project schedule. Activities may not always be the most desirable basis for bar chart preparation or usage. Simpler diagrams with fewer bars and showing larger and more comprehensive segments of the work may be more suitable for ordinary job applications. In such a case it is an easy matter to combine strings or groups of activities into a single bar chart item.

#### **Scheduling Subcontractors**

Knowing where you're going before you get there is half the battle; so don't leave Construction Schedules out of your plan.

Despite having executed contracts and agreements with subcontractors, one of the most common problems, which still persist, is getting the subcontractor on the job when needed, and keeping them there until the job is completed. Here again, is where the construction schedule comes in handy as a valuable management tool. If the schedule is adhered to, the grantee can give subcontractors plenty of notice of when they will be needed on the job, and starting and completion dates can more accurately be negotiated. To further maximize the usefulness of the construction schedule, on-site meetings should be arranged with subcontractors prior to them starting their work to coordinate in detail the work to be done, and during construction to review their progress and performance. Each subcontractor should receive a copy of the construction schedule so that they are fully aware of the organization's construction interdependencies and time lines. Of course, there may always be dilemmas which arise, but with a feasible construction schedule, and open and clear lines of communication, problem solving becomes much easier.

Following these simple guidelines will minimize most of the problems that arise with subcontractors. Remember, clear communication and prompt action is essential.

# "MUTUAL" SELF-HELP HOUSING A CONSTRUCTION SUPERVISORS GUIDELINE TO SUCCESS

Motivation may not be "Your Job", but... It's a way to get "Your Job" done.

#### Key's to keeping participants motivated:

- Keep participants grouped together.
- Do not show any favoritism
- Brag on jobs well done.
- Compliment the teamwork.
- Understand that the participants have everyday problems.
- Show understanding of the participants' inability to work as a professional tradesman.
- Set reasonable goals that allow the group to feel a sense of achievement.
- Set long-range goals that groups can easily relate to: such as occupying their house in time for Christmas, Easter, or Thanksgiving.
- Make working on houses something the group looks forward to, such as cookouts on
  the job site when a goal is met or recognizing a family member's birthday, etc.
  Suggesting that group members bring coffee, donuts and homemade ice cream for such
  occasions.
- Have a staff member from the office visit the job site and take photographs of the members working or at different stages of a house to show the members at group meetings.
- Encourage group members to take scheduled breaks together.
- Mix up teams / partners in the work group.
- Remember that these are participants who were probably not previously acquainted with each other and have been thrown together to build 5, 6 or even more houses as a group. It would be to the grantees best interest to make the process run as smoothly as

possible to ensure the construction will be completed on a timely schedule.

#### **Group Motivation**

Every group goes through cycles of high and low motivation.

Early into the construction process, when progress is most visible, the group members are eager and highly motivated. After three or four months of construction with delays, bad weather conditions, problems with subcontractors and suppliers, motivation and moral may be at a low ebb among the individual members or the group as a whole. The Construction Supervisor must be able to improve the moral by motivating individual members as well as the whole group.

One of the best day-to-day tools to use to solve this difficult problem is to be complementary in front of the group. A Construction Supervisor giving compliments on a regular basis can do wonders. These can be as simple as any of the following examples:

- "Great Work!"
- "Now you have got the hang of it!"
- "Why don't you show the rest of us how you did that."

Give people a reason, and they often perform beyond expectation.

#### **Group Communication**

The Construction Supervisor is responsible for leading the group successfully through the construction process. This is much easier said than done.

The Construction Supervisor must start off with and maintain leadership of the group. A position of leadership allows the Construction Supervisor more opportunity to be accepted as an authority figure and trainer who can motivate and assist the group through problems.

The communication should include today's work plans, tomorrow's plans, locations, and task and labor needs from the group. Always keep the families informed of their next scheduled days workload, time and location. The group should keep the supervisor informed of their needs and intentions so that the most can be accomplished each day.

#### **Group Problem Solving**

Problem solving is a skill that must be taught to the group by the Construction Supervisor. Because of the many group decisions that need to be made during construction, decision making and problem solving skills should be part of the group meetings.

REMEMBER: The group must try to solve its own problems first. The Construction Supervisor is not a referee. Do not allow yourself to be pulled into this role.

Potential problem areas should be discussed with the group. Acceptable solutions to the problems can be found in group meetings and sessions. Discuss these sample problems:

- Handling a non-participating family member.
- Judging the qualities of a family's labor performance.
- Stopping disruptive behavior on the job site.

The Construction Supervisor should introduce these potential problem areas and ask the group how they will handle them.

REMEMBER: Make it clear to the group members that they must monitor their own behavior and solve their own problems as much as possible.

In addition to the Construction Supervisors responsibility, recognizing and solving problems within the group is the mutual responsibility of each group member. If problems are persistent and are beyond the capacity of either the group or the Construction Supervisor to resolve, notify the Self-Help Director. The Construction Supervisor must not let little problems grow into unsolvable situations.

Also Note: If an individual, a family, or the whole group is at an impasse on an issue that you have no solution for, you must go to your Executive Director or Project Director for assistance immediately. An agency will consider releasing a participant from his or her contract during the construction phase only as a last resort. Avoid this possibility by all means.

#### **Failure to Meet Labor Contributions**

A participant's failure to meet its labor contribution is to be treated as a breach of contract to the group. This failure to keep a mutual promise to the group to assist each other must be responded to as quickly as possible. The Membership Agreement should contain a clear description of what will occur if the participant fails to contribute the agreed-upon weekly labor contribution.

The Construction Supervisor encourages the Members to maintain the Labor Commitment.

The Construction Supervisor should ensure its members to fully contribute their hours to the labor commitment to ensure the success of their project and to avoid their individual expulsion from the group. The exact procedures to be followed when a participant fails to meet their labor commitment should be incorporated into the Membership Agreement and carried out quickly by the self-help agency.

#### **Keep the Group Aware of Its Commitment**

There is no set, guaranteed method that assures the group or the Construction Supervisor that each participant will fully meet its labor commitment.

The following are suggested steps to follow when a participant shows signs of not maintaining their promised labor contribution to the group:

- 1. The construction supervisor will contact the participant at home and will determine:
  - a. If the participant has a problem that will temporarily excuse it from the labor commitment.
  - b. If the reason for the member's non-participation does not appear to be acceptable, the Membership Agreement Labor Commitment letter needs to be explained in full to the participant. (At this time, remind the participant of the labor agreement that was acknowledged and signed and that included in this agreement is "Labor Contribution Commitment".)
  - c. In addition, the participant should be informed of the repercussions that will result from a continued failure to assist the group.
  - d. If the participant agrees to return to the groups' project, make the participant aware of how many hours it needs to make up to be in compliance with the total number of group hours.

- 2. If the Construction Supervisor and the group fail to get a member to return to work, the group members' problem must be discussed with the Community Development Manager (CDM).
- 3. The self-help agency can choose to stop all work on that participant's house until the hours are made up. The Construction Supervisor must realize that this action may force this participant from the self-help program if it does not return to fulfill the labor contribution commitment immediately.
- 4. The self-help director or project director should determine when the participant to such an extent has breached the conditions of the Membership Agreement that there are sufficient grounds for expulsion of that participant from the group.

#### **Community Development Manager and Maintaining Labor Contribution**

The success of any self-help housing construction program is to have a clear understanding and agreement with the CDM on how the Membership Agreement's "labor contribution" will be viewed by RD. Specifically, what the Construction Supervisor needs to know is what response and support the self-help agency can expect to receive from the CDM.

An important step for the self-help agency is to get a commitment from the CDM that they will listen to complaints only when all parties are present. This means:

- The self-help agency,
- The family, and
- A representative of the group and
- Rural Development.

This action will protect the interests of all parties and will preserve the concept of the group's involvement in the actions of individual members of the group.

#### **Conflict Management**

Conflicts will arise during the long construction process; they must be eased and eliminated before they disrupt the project. Although there are some forms of conflict, which can have positive outcomes (competitions, games, races, etc.), our major focus here is on those that do not. The types of conflicts, which will arise during construction, will range from minor annoyances, to disputes, and to clashes. The Construction Supervisor must be aware of any rise in the tension levels of the group and not allow personality conflicts to become more than an annoyance. All personality conflicts must be dealt with quickly to ensure a smooth construction process for the entire group.

#### **Avoiding Conflict**

Avoiding conflict is a completely different facet of management. The Construction Supervisor should take every precaution to avoid the appearance of partiality among group members. Although it may be impossible to please each and every member of the group all the time, the Construction Supervisor will appear to be impartial through the following actions:

- Keep all houses in each group at nearly the same level of progress.
- Be fair and impartial in assigning chores. Rotate assignments given to teams within the group.
- Remember that you are not dealing with trade craftsmen and the construction abilities
  of the group will be limited. It is the responsibility of the Construction Supervisor to
  teach the group how to build these houses.

It will be very difficult for a Construction Supervisor to lead if the group feels that the supervisor plays favorites. The supervisor must be supportive of the group, and on occasion, must praise individual achievements as an example to the group. Be aware that this is a double-edged sword. Do not chastise a participant in front of the group.

#### **Recording Construction Time**

The group members and the Construction Supervisor have to schedule their time and location with great care and attention. Especially if sites are scattered, the rotation of people from one site to another, assignments of special work teams, and a reasonable work schedule for the Construction Supervisor can all be very respectable challenges.

Ongoing construction planning must be done frequently, perhaps, at the weekly group meeting. Recording has to be done at least once a day by everybody involved in construction.

As a project staff person, the Construction Supervisor must record their hours on a Time and Attendance Report. The group coordinators record their work hours and location on a Construction Time Report.

#### **Group Communication**

The key to the group's success will be the construction supervisor's communication skills. Speaking to, the training of, and working with a diverse group of people does not come easily to many; but to the successful construction supervisor, it needs to be second nature.

The reasons for good communication are simple:

- It is too time consuming to work with the participants one at a time.
- If the participants think of themselves as a group, the group will be well on their way to producing mutual self-help housing.

**REMEMBER:** 

The participants are required to build their houses through mutual selfhelp techniques: mutual self-help means that with one another, the group will work on each of the houses in the project until together they finish them all. The construction supervisor will train and assist the group through the construction process.

#### **Enforcing the Membership Agreement**

It is difficult to pull a group together once they have run amok. If a construction supervisor loses control of a group, it is not easily regained. For this reason, the construction supervisor must make sure that little problems always do not lead to bigger ones. The construction supervisor must maintain the group's attention on their common goal: finishing their houses. It may need to be clarified, over and over again if necessary, that the only way to reach the goal will be through strict adherence to the labor commitment pledged by each member of the group when they signed the membership agreement.

NOTE: The Construction Supervisor must enforce The Membership Agreement.

#### **Grievance Procedure**

The Membership Agreement must contain a formal set of grievance procedures.

The "grievance procedures" must recognize the possibility of problems:

- Among the group members
- Between the construction supervisor and the group
- Between the group and the agency
- Between the group and the Rural Development staff

The procedure to resolve or mitigate a grievance must be logical and just; the group, if faced quickly and directly can resolve most of the problems occurring among the group's members. The construction supervisor must keep the group moving smoothly through the construction process.

REMEMBER: The group should attempt to settle the problem first.

When a problem interrupts construction progress, the construction supervisor must act decisively to eliminate the source of the problem. The construction supervisor should encourage the members of the group to bring complaints to the weekly group meetings. At these weekly meetings, the construction supervisor, along with a neutral member, should facilitate the complaint portion of the session. The preferred outcome of this session is for the group to come to a consensus on how the problem should be resolved.

If the parties fail to agree to the consensus of the group, the construction supervisor should attempt to resolve the problem. This may at times prove difficult; especially if the construction supervisor, another self-help agency staff member or Rural Development is one of the persons directly involved in the disagreement.

If the construction supervisor is unable to resolve the problem, then a formal request is made to the self-help agency's project director and/or executive director or the Rural evelopment local office staff to assist in resolving the crisis. This request should be in writing. The request must present the problem and the surrounding issues in an unbiased manner.

REMEMBER: The construction supervisor must avoid all actions that will disrupt construction.

#### **Construction Completion:**

- Warranties
- Supplies
- Suggested Maintenance

**NOTE:** 

This guide was designed as a tool to assist the Construction Supervisor in the day-to-day events of the construction of self-help housing. Due to the fact that programs vary in their daily activities, this guide may not be the absolute rule of the way your program should run. We suggest that you base your construction program off of this guideline; however, it is not the absolute rule to management.

If you have any comments or questions, please contact the T&MA Contractor serving your area.

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#### **APPENDIX**

#### RD INSTRUCTION 1944-I (Self-Help Technical Assistance Grants)

• http://www.rdinit.usda.org

## **RD INSTRUCTION 1924-A** (Construction and Repair) - Subpart A - Planning and Performing Construction and Other Development

http://www.rdinit.usda.gov

## **RD INSTRUCTION 1924-C** (Construction and Repair) - Subpart C - Planning and Performing Site Development Work

• http://www.rdinit.usda.gov

#### WEBSITE REFERENCES

http://www.rurdev.usda.gov/
 http://www.rdinit.usda.gov/regs/
 http://www.policyworks.gov/
 http://www.bocai.org/
 http://www.bocai.org/
 for USDA-Rural Development Home Page for USDA-Rural Development Regulations for GSA Office of Governmentwide Policy BOCA Building Codes, ICC, International mechanical codes, statewide building codes ....

http://www.icbo.org/
http://www.sbcci.org/
http://www.intlcode.org/
http://www.intlcode.org/
http://www.intlcode.org/
International Code Council (CABO has merged with INTLCODE)

http://www.fnph.org Florida Non-Profit Housing, Inc.

http://www.littledixie.org Little Dixie Community Action Agency, Inc.

http://www.ncall.org NCALL Research, Inc.

http://www.rcac.org Rural Community Assistance Corporation

http://www.hudclips.org HUDCLIPs - Standard Forms and other HUD forms

http://www.hometime.com
Home Time - Lots of good tips, safety, etc.

http://www.residentialsteel.com Residential Steel Construction Services

http://www.nahb.com National Association of Home Builders

http://www.lowes.com Lowes Companies, Inc.

http://www.homedepot.com

http://www.84lumber.com

84 Lumber

http://www.nahn.com National Affordable Housing Network - assists non-

profits with house plans http://www.nws.noaa.gov National Weather Service

http://www.owenscorning.com Owens Corning - vast array of building products

#### **APPENDIX** (continued)

#### RD AN NO. 3449 (1944-I)

• http://www.rdinit.usda.gov

#### **MEMBERSHIP AGREEMENT**

• Obtain a copy of your agency's membership agreement

#### **DESCRIPTION OF MATERIALS (Form RD 1924-2)**

• http://www.rdinit.usda.gov

#### **INVITATION FOR BID (Form RD 1924-5)**

• http://www.rdinit.usda.gov

#### BID (PROPOSAL) (FmHA 1924-5)

• http://www.rdinit.usda.gov

#### SUB-CONTRACTOR'S QUALIFICATION QUESTIONNAIRE

• See Attachment A

#### **CONSTRUCTION CONTRACT (Form FmHA 1924-6)**

• http://www.rdinit.usda.gov

#### **CONTRACT CHANGE ORDER (Form RD 1924-7)**

• <a href="http://www.rdinit.usda.gov">http://www.rdinit.usda.gov</a>

#### CONSTRUCTION CHECKLIST

• See Attachment B

#### FINAL INSPECTION CHECKLIST

• See Attachment C

#### CONSTRUCTION TIME REPORT

See Attachment D

#### Mutual Self Help Sub-Contractor Selection Questionnaire

#### **General Information**

Cor	ntractor Name:					
Bus	iness Address:					
Bus	siness Phone/Fax/Email					
Ow	ners Name:					
	chis company a: Corporation Partnership Owner erator Joint Venture Other					
Org	anization					
1.	Are you a general contractor? or Sub-Trade contractor?					
2.	How many years have you been in the construction business?					
3.	How long under the present name? years.					
4.	Have you worked under a different name? If so, please list name, dates and places where business was conducted?					
5.	How many full time employees do you have on staff?					
Lic	ensing & Bonding					
6.	Contractors License #					
7.	What Trade Categories is your company legally qualified to work under:					
	Trade License # Years of experience					
	A					
8.	Is your organization in good standing with the Contractors License Board?					
9.	Does your company have any outstanding or pending citations filed with the Contractors Licens Board? If so explain:					

10.	Has your organization ever been bonded?					
11.	Maximum amount of Performance Bond \$					
12.	. Name and address of your most recent Bonding Company:					
13.	Insurance Coverage:					
	<u>Company</u>	T	<u>ype</u>	Limits		
Evi	erience					
1.	Have you been sued in the last five years for breach of contract, default or any other cause of action with regard to your business activities?  If soexplain:					
2.	What categories of work doc			h its own staff?		
	Has your organization ever failed to complete any work awarded?  Has your organization filed any lawsuits or requested arbitration with regard to construction					
	contracts within the past five years?					
5.	Are you familiar with the Mutual Self Help Program?					
6.	Have you ever worked on a Self Help Housing project?  If so, When & Where?					
7.	What projects do you current <b>Project Loca</b>	•		Scheduled Completion Date		
	A B C					
8.	Can you give us three local trade references that would vouch for your quality of workmanship and contracting agility?  A					
9.	A B			jects that we may visit?		

## **General Questions**

1.	What experience do you have in working with non-profit organizations?
2.	If selected as a contractor to bid on this project can you promise us with an accurate cost estimate, within 7 days of receipt of bid documents (Plan Specifications)?
3.	If you are the selected Sub trade contractor for this project, what percentage of time will you (owner) be onsite supervising the project
Coı	ntract Requirements
4.	Describe your billing and payment requirements?
5.	Will you be able to obtain material and supplies on trade credit? If so, what payment terms are required?
6.	If selected as the contractor for this development project, describe how and under what conditions you would ensure:
	<ul> <li>A. Adequate supervision of work activity</li> <li>B. Adequate Workforce present on the job</li> <li>C. Timely completion of work activities</li> <li>D. Scheduling of work to be performed, material delivery and inspections</li> </ul>

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### FOR INTERVIEWERS USE ONLY

DATE:	INTERVIEWER:	
RANK:		
	COMMENTS:	

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### **Attachment B**

# CONSTRUCTION CHECKLIST

FAMILY NAME:		_ PHONE#	<b>#</b> :
ADDRESS:		PHONE#:	
LOT:	BLOCK:	SUBDIVISION	[:
BUILDING PERMIT#	t:		
PRELIMINARIES	DATE CALLED	START DATE	FINISH DATE
Stake			
Dig			
Permits			
Sewer			
Building			
Temporary Power			
Footings			
Foundation			
Waterproofing			
Under-slab Inspection			
Back-fill			
Flatwork			
Steel			
Lumber			
Windows & Doors			
Shingles			

ROUGH – IN	DATE CA	<u>LLED</u>	START DATE	<u>FINISH I</u>	<u>DATE</u>
Start Framing					
Elevation				_	
Brick:	Stucco:	St	one:	_Siding:	
Lumber Pick-up				· <u>-</u>	
Flashing:				_	
Plumbing				_	
HVAC				_	
Roof				_	
Garage Door					
MECHANICALS	DATE CA	LLED	START DATE	<u>F</u>	INISH DATE
HVAC					
Plumbing				- <u>-</u>	
Electrical		<u>-</u>		- <u>-</u>	
Phone/Cable					
Furdown				- <u>-</u>	<del>_</del>
Rough-in Cleanup					
Fire-stop				- <u>-</u>	
Inspection					
Cabinets (order only)					
Insulation (bats)		<del></del>	<u></u>	- <u>-</u>	<u></u>
Permanent Gas			<u></u>		<u></u>
Permanent Electric				- <u>-</u>	

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DRYWALL	DATE CALLED	START DATE FINIS	<u>H DATE</u>
Measure Sheetrock			
Load House			
Hang Sheetrock			
Tape		<u></u>	
Sand Walls			
Texture Walls		<u> </u>	
Texture Ceiling			
Insulation (Blow Attic)		<u></u>	<u></u>
Post Drywall Clean		<u></u>	<u></u>
Flatwork:			
Driveway			
Front Stoop			
Walkway		<u></u>	<u></u>
Patio		<u></u>	<u></u>
HVAC Pad			<u></u>
Exterior Treatments: (brick, stucco, siding)		<u>-1-</u>	

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### **FINAL INSPECTION CHECK LIST**

EXTERIOR	OK	COMMENTS
Garage doorjambs sealed		
Trim cut properly		
Flashed properly at roof and windows		
Trim and windows caulked properly		
Concrete clean		
Siding properly nailed No bird holes		
Utility penetrations caulked Weather-strip on doors Graded properly (Need 6" fall in first 10")		
Trash removed Seams on siding joined properly Gutter extensions installed to grade All forms removed from concrete 15. Landscaping 16. Driveways/Walkways		
ADDITIONAL COMMENTS:		

ENTRY	OK	COMMENTS
<ol> <li>Front door jambs sealed</li> <li>Door operates properly/square</li> <li>Thresholds clean</li> <li>Door bump stops installed</li> <li>Brass trim at door clean</li> <li>Entry fixture clean</li> <li>Closet pole/shelf installed</li> <li>Entry Floor</li> </ol>		
ADDITIONAL COMMENTS:		
LIVING ROOM	OK	COMMENTS
<ol> <li>Carpet</li> <li>Windows open/lock properly</li> </ol>		
ADDITIONAL COMMENTS:		
DINNING ROOM	OK	COMMENTS
<ol> <li>Carpet</li> <li>Windows open/lock properly</li> </ol>		
ADDITIONAL COMMENTS:		
KITCHEN	OK	COMMENTS
1.Back door Clean and operable No dings Thresholds clean and adjusted		
2.Windows open/lock properly		
<ol> <li>Cabinets</li> <li>Doors adjusted         <ul> <li>Shelves installed</li> <li>Bumps and handles installed</li> </ul> </li> <li>4.Appliances operate properly</li> </ol>		
5. Sink		

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6. Counter top free of chips and scratches		
7. Shoe installed and filled		
8.Vinyl		
ADDITIONAL COMMENTS:		
UTILITY ROOM	OK	COMM
1.Catch-A-Drip clean 2.Vinyl	_	
ADDITIONAL COMMENTS:		
MASTER BEDROOM	OK	COMMENTS
1. Windows open/lock properly		
2. Carpet		
3. Bath		
Tissue holder w/spool installed Towel rack secure		
Toilet Vanity top and cabinet		
Vinyl		
Privacy lock/key		
ADDITIONAL COMMENTS:		
HALL BATH	OK	COMMENTS
1.Shower/Tub 2 Toilet		
1.Shower/Tub 2.Toilet 3.Tissue holder w/spool installed 4.Towel rack secure		

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6.Vinyl 7. Privacy lock/key		
ADDITIONAL COMMENTS:		
BEDROOM # 2	OK	COMMEN
<ol> <li>Windows open properly/lock properly</li> <li>Carpet</li> <li>Doors</li> </ol>		
ADDITIONAL COMMENTS:		
BEDROOM # 3	OK	COMMENTS
<ol> <li>Windows open properly/lock properly</li> <li>Carpet</li> <li>Doors</li> </ol>		
ADDITIONAL COMMENTS:		
BEDROOM # 4	OK	COMMENTS
<ol> <li>Windows open properly/lock properly</li> <li>Carpet</li> <li>Doors</li> </ol>		
ADDITIONAL COMMENTS:		
GARAGE / CARPORT	OK	COMMENTS
Steps Threshold supported Floor clean		

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### ADDITIONAL COMMENTS:

BASEMENT	OK	COMMENTS
1. Sheetrock clean and dry		
2.Steps secure and clean		
3.Floor clean		
4.Tabs removed		
5.HVAC (new filter & clean)		
6. Water heater (lit & clean)		
7. Rim insulation		
8.Sump discharge secure		
9. Excess paint under stairs		
ADDITIONAL COMMENTS:		
GENERAL INTERIOR	ОК	COMMENTS
1. Floor squeaks		
2. Doors and windows operable		
3.Carpet		
ADDITIONAL COMMENTS:		

# Sample Construction Time Report for Families

	Time		Site	Time		Site	Time		Site
	From	To		From	To		From	To	
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									
Sunday									
					Site				Total
					Site				
Hours									All