

CONTRACTOR'S MANUAL AND ALL TRADES MASTER SPECIFICATIONS FOR THE OFFICE OF COMMUNITY & ECONOMIC DEVELOPMENT HOUSING PROGRAMS



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I. INTRODUCTION

Thank you for your interest in becoming one of our approved Rehabilitation Contractors. Our Program depends upon the skills and attitudes of our Contractor partners for its continued success. The purpose of the Contractor's Manual and All Trades Master Specifications is to provide all interested contractors with the information needed to provide construction or rehabilitation services to the customers of the Office of Community and Economic Development and communities in which it serves. This Manual outlines minimum standards of materials, workmanship, and levels of quality required by the guidelines set forth by of this Department. It is intended that these minimum standards shall prevail, except when standards that are more stringent are required by County, State, or local codes.

All Contractors and Subcontractors bidding upon work available through the Office of Community and Economic Development must familiarize themselves with the policies, materials standards, and methods of construction contained within this Manual. All work specifications will refer to and incorporate these standards and all Contractors are expected to conform to the policies and guidelines contained within this Manual.

Each Contractor, upon acceptance and approval by the Office of Community and Economic Development, will be added to the Contractor List and will be provided with one copy of this Manual. When new procedures are developed and changes are made to the current guidelines, policies and procedures, copies will be issued for inclusion within this Manual as an addendum, to all Contractors on the Approved Bidder's list.

Any questions concerning this Manual or its contents should be referred to the *Office of Community and Economic Development at (734) 544-3019*.

Thank you for your interest and participation in the OCED Housing Programs. Through your efforts and support many Washtenaw County residents will now have safe, decent and affordable housing.

II. HOUSING PROGRAMS OFFERED BY THE OFFICE OF COMMUNITY AND ECONOMIC DEVELOPMENT

► OWNER-OCCUPIED REHABILITATION

Deferred loans are available up to \$25,000 to rehabilitate/repair low-income, owner-occupied homes throughout the jurisdictions of the Urban County for families earning 80% or less of the Area Median Income. The Owner-Occupied Housing Rehabilitation Program provides the general rehabilitation necessary to bring the structure into compliance with applicable building codes, rehabilitation standards, and lead-based paint regulations. The program addresses actual and incipient building, health, and safety code violations, accessibility improvements, energy improvements, which may also be performed as part of any housing rehabilitation project authorized under this program. General improvements are not eligible for housing rehabilitation assistance unless approved by the OCED Rehabilitation staff. This is a fully deferred, zero (0) percent loan that becomes due and payable upon sale, rental, refinance, and transfer of the property. The loan will be forgiven if the owner resides in the property for 30 years.

► EMERGENCY REPAIRS

This program offers grants for urgent repairs up to \$5,000 to low-income, owner-occupied households within the jurisdictions of the Urban County. Emergency repair grants may be made to pay for construction work to correct items that are determined by the OCED Rehabilitation Specialist to be of an immediate and necessary nature and which can have an immediate effect on improving the health and/or safety of the occupants. This program includes emergency repairs in plumbing, electrical, roofing, and heating. Emergency grants will be limited to a one-time grant up to \$5,000 per dwelling during a three-year period. The homeowner is not required to pay back any portion of the financial assistance received under this program, unless the work exceeds the emergency repair program threshold.

► ACCESSIBILITY IMPROVEMENTS

This program offers grants up to \$7,5000 for the installation of interior and exterior accessibility improvements to homes occupied by very low income persons (up to 50% AMI), adjusted for family size, in order to improve accessibility for general home needs. This program provides the funding for the material and labor costs incurred to install accessible improvements for any homeowner throughout the jurisdictions of the Urban County earning less 50% or less of the Area Median Income. Accessibility improvement grants will be limited to a one-time grant up to \$7,5000 per dwelling during a five-year period.

▶ **MANUFACTURED HOME REPAIR**

This program offers a 0% interest loan up to \$7,500 to mobile/manufactured homes owned and occupied by low income households (up to 80% AMI) located within a manufactured home park, and within the jurisdictions of the Urban County. These one-time grants may be used for roof repairs, plumbing, electrical or heating systems, broken windows, and other needed repairs.

▶ **ENERGY EFFICIENCY**

This program is a component of OCED Housing Programs, separate from the Owner-Occupied Housing Rehabilitation Program. It is intended to provide energy efficient improvements for low income owner-occupied houses. The program is designed to reduce utility costs through energy improvements and to educate homeowners about energy efficiency. The maximum loan for owner-occupied single family houses is \$15,000. Eligible costs include energy audits, Energy Star™ appliances; energy efficient lighting, windows, doors, HVAC systems; air sealing; insulation; and water saving devices.

▶ **HOME BUYER PURCHASE AND REHABILITATION**

The County will provide up to \$60,000 to a qualified homebuyer to purchase and rehabilitate their home. The County will provide up to \$15,000 to cover the closing costs and fees and up to 50% of the down payment required by the lender for a qualified homebuyer, combined with rehabilitation for a total of \$37,500. Up to \$12,500 in additional funds will be provided to the homebuyer for energy efficient and green improvements.

III. CONTRACTOR POLICIES AND PROCEDURES

A. CONTRACTOR APPLICATION REQUIREMENTS

All Contractors performing work for the Office of Community and Economic Development (OCED) Housing Programs must receive certification and approval from the OCED Rehabilitation Staff. Qualified contractors are required to complete a program application, have a current builder's license, carry or obtain liability, automotive, and worker's compensation insurance, provide references, submit a record of financial stability, and any other required documentation. The following documentation must be submitted and approved by OCED rehabilitation staff before a contractor can bid on and perform any work for the *Office of Community and Economic Development*:

- A. Submit a completed and signed application.
- B. Provide a copy of your current Contractor's License and/or Qualified Trade/Business Licenses.
- C. Provide four references from customers you have worked for, or are currently working for (within the past three years).
- D. Provide a certificate from the contractor's insurance carrier that meets the City/County requirements for general liability, automobile coverage and worker's compensation. The City of Ann Arbor/Washtenaw County Office of Community and Economic Development must be listed on the certificate as "additional insured".
- E. Provide worker's compensation insurance as required by State of Michigan statutes.
- F. Provide line of credit or other financial verification from your banking institution.
- G. Be free of any substantiated complaints or violations with the State of Michigan during the last three (3) years from the date of application.
- H. Maintain a consistent record of passed inspections with no lengthy construction delays.
- I. Have pulled permits and rehabilitated or completed the construction of at least four homes within the last two (2) years.
- J. Register as a vendor with Washtenaw County.

Once the Contractor receives preliminary approval, he/she will be placed on the Approved Contractors List on a probationary basis and will be eligible to bid on construction, repair and rehabilitation projects.

B. PROVISION FOR NEW CONTRACTORS:

Contractors newly approved to the Housing Rehabilitation Programs will be placed on probationary status and will only be able to have one contract in progress at any time until they have successfully completed at least three (3) projects. Successful completion of three projects removes this probationary restriction and the Contractor may have concurrent rehabilitation projects at any given time.

C. BIDDING:

A computerized list of randomly selected contractors will be generated from the OCED housing database and the Invitation to Bid (ITB) will be sent by email for any upcoming projects. The bid documents will include the property location, homeowner's name, scope of work, date and time of the scheduled **MANDATORY** pre-bid walk-through, bid response date and bid opening date. ***The Contractor must attend the pre-bid walk-through to be eligible to bid on the project (See Section E "Contractor Walk-Through" for additional details).*** Contractor participation is mandatory in order to be eligible to bid and remain on the Approved Contractor's List. ****Note**** Invitation to bid emails are generally sent on Thursdays of the week.

D. WORK WRITE-UP:

The Work Write-Up is prepared by the OCED Rehabilitation Specialist assigned to the project. The Work Write-up identifies the rehabilitation items that must be included in the Contractor's bid proposal as well as other Homeowner requested improvements. *The work is specified according to the following priorities:*

- a) **Priority #1** - Code Violations
- b) **Priority #2** - Lead Hazard Reductions
- c) **Priority #3** - Incipient Violations
- d) **Priority #4** - Energy Efficiency/Conservation
- e) **Priority #5** - Accessibility Improvements
- f) **Priority #6** – General Property Improvements (upon staff approval)

E. MANDATORY WALK-THROUGH:

The purpose of the mandatory Contractor Walk-Through is to discuss the specific details and methods relating to the project scope of work listed in the bid package. Changes, additions, deletions, and refinement of the scope of work may be issued through an addendum sent by email before the bid due date. The Walk-Through will include the Homeowner(s), Contractors, Purchasing staff (when applicable) and the OCED

Rehabilitation Specialist assigned to the project. The Walk-Through will start promptly at the time specified on the ITB. Any Contractors who arrive late will not be eligible to bid. Contractors and their sub-contractors may not begin to inspect the home or construction site before the Rehabilitation Specialist arrives and the Walk-Through officially starts. Any changes to the bid specifications will be reviewed at the end of the Walk-Through to ensure that Contractors have noted all changes discussed during the Walk-Through for consistency. An Addendum will be issued containing all changes made to the original work write-up. Failure to bid according to the final bid specifications may be just cause for disqualification of the contractors' bid. All measurements, quantities, and dimensions provided by the OCED in the bid specifications are for the contractor's general reference prior to the mandatory walk through. **All measurements, quantities, dimensions listed in the bid specifications are approximates...** The bidder is responsible for ensuring that the measurements are accurate in the bid submitted. The OCED is not responsible for bidder cost overruns due to discrepancies in the measurements or quantities provided in the bid specifications.

F. CONTRACTOR PROPOSAL:

Bids shall be submitted on forms provided by the OCED. The Contractor will list pricing for the individual specification line items on the work write-up including a total for the entire project. Sign the work write-up and submit it in a sealed envelope with the owner's name, address, case number and bid date on the outside of the envelope. The proposal must be submitted before the bid opening date and time listed on the bid cover sheet. Late proposals will not be accepted. The specifications outline the work required for the project as agreed upon by the Homeowner and the OCED Rehabilitation Specialist. This will ensure that Contractors are bidding based on the use of similar or like materials and scope of work. It also eliminates any misconceptions between the Homeowner and the Contractor as to what they will/will not expect in the contract. Numerical value will super cede written value in the evaluation of contractor proposals.

The Contractor agrees that he/she has prepared the contract proposal and that the contents are consistent and accurate as to the name of the Contractor, scope of work, and the price of the contract. The Contractor acknowledges the performance requirement established in the work write-up, and/or contract, and warrants that all work undertaken will conform to the bid specifications.

Once you submit your bid you are bound to the price that is stated on your proposal for a period of 60 business days. All questions related to job specifications should be cleared prior to submission of bid by contacting the OCED Rehabilitation Specialist.

G. MOST RESPONSIVE AND RESPONSIBLE BIDDER:

Except as otherwise specified, contracts shall be awarded to the "most responsive and responsible bidder." In determining the most responsive and responsible bidder, price shall be considered as well as the following factors:

1. The ability, capacity and skill of the bidder to perform the contract or to provide the service required;
2. Whether the bidder can perform within the time specified;
3. The character, integrity, reputation, judgment, experience, and efficiency of the bidder, based upon objective verifiable information;
4. The bidder's history of compliance with applicable laws and ordinances relating to the contract performance desired;
5. The quality of performance previously displayed by the bidder;
6. The adequacy of the bidder's financial resources;
7. The ability of the bidder to provide future warranty work or services relating to the subject of the contract;
8. Whether the bidder is presently in default to the City/County for any reason.

H. CONTRACT AWARDS:

The following criteria will be used when awarding a contract:

- a) Bid amount does not exceed *15% higher or 15% lower* that the internal cost estimate in the work write-up prepared by the OCED Rehabilitation Specialist.
- b) The bidder is the most responsive and responsible, except when the option to reject all bids is exercised.
- c) Documentation of financial resources adequate enough to cover contract.
- d) Contractors that provide the lowest bid on several simultaneous projects may be awarded one project at a time until satisfactorily completing three projects. Additional projects may be awarded as outlined in Subtitle D below.
- e) Award of no more than three simultaneous projects will be based on the demonstrated capability of the contractor on a case-by-case basis.
- f) Contractors Section 3 status.
- g) Multi-family and Rental Rehabilitation Projects: These projects will be awarded to those Contractors who have demonstrated the capacity to work on two or more projects simultaneously and have demonstrated above average performance as described below:

1. **Projects completed on time;**
2. **Projects consistently pass inspection;**
3. **Warranty service is promptly taken care of within three business days for non-emergencies; within 24 hours for emergencies;**
4. **Positive customer evaluation reports, and**
5. **Positive OCED evaluation reports.**
6. Contractors section 3 status.

The OCED reserves the right to reject any or all bids, to waive or not waive informalities or irregularities in bids or bidding procedures, and to accept or further negotiate cost, terms, or conditions of any bid determined by the OCED to be in the best interest of the OCED even though not the lowest bid.

The OCED shall promptly notify successful bidders upon such award.

I. CONTRACT DOCUMENTS:

- a. The OCED Rehabilitation Specialist prepares bid packages, awards bids, conducts progress inspection during the rehabilitation project, and makes payment on behalf of the homeowner.
- b. The agreement for rehabilitation services is between *the Contractor* and *the Homeowner* and is executed during the **Pre-Construction Conference**. At the pre-construction conference, the Contractor and Homeowner will agree to work conditions, use of facilities and other construction related matters. The contract documents must be fully executed prior to beginning the rehabilitation work. These contract documents shall state a specific date for commencement of work, a specific date for completion of work and include a copy of the work write-up. An executed copy of the agreement will be provided to the Homeowner and Contractor.
- c. The Contractor and OCED Rehabilitation Specialist sign off on the "*Notice to Proceed*". Work must begin within twenty-one (21) calendar days of issuance of the *Notice to Proceed* and be completed within ninety (90) calendar days of issuance of the *Notice to Proceed*.
- d. Only the Homeowner, the License Holder or the Documented Responsible Officer for the Contractor can sign the contract documents.
- e. In a situation where the Homeowner refuses to provide written authorization to approve the Contractor's payment request for completed work. The OCED at its discretion can administratively approve the payment request upon satisfactory completion of the progress/final inspection by the Rehabilitation Specialist.

- f. In no instance should any unauthorized agreement exist between the Homeowner, Contractor or any other entity during the construction period regarding the repairs and modifications to the home. Failure to comply with this provision will result in the termination of the contract and require immediate payback of any funds expended by the OCED. If the Contractor performing other repairs and modifications is the same as selected by the property owner for the OCED Housing Rehabilitation Program, then all funding due that Contractor will be forfeited and the loan will be adjusted or cancelled, as required.

J. TIME OF COMMENCEMENT AND COMPLETION:

The Work for all projects except multi-family and new construction, shall commence within 21 calendar days of authorization by written Notice to Proceed from the Office of Community and Economic Development (OCED) and shall be completed no later than 90 calendar days from the commencement date of the Notice to Proceed**. The Contractor shall be liable for, and shall pay (\$ 100.00) one hundred dollars per day, as liquidated damages for each calendar day of delay until the work commences and/or is completed. If work has begun, the liquidated damages owed to OCED may not exceed 75% seventy five percent of the remaining balance of the homeowners' contract. If liquidated damages should reach 75% of the remaining balance the contract shall be terminated and the remaining Work shall be completed in the best manner deemed appropriate by the OCED.

- a. If Work has not begun within 30 calendar days the contract shall be terminated and the Work shall be negotiated with the next responsive and responsible bidding contractor
- b. **** If the work is delayed at any time by causes beyond the contractor's control, the contractor must provide written notice 10 calendar days prior to completion date to request an extension. The contract may be extended by Contract Amendment for such reasonable time as the OCED staff deems necessary.**
- c. ***Contractors may submit a written withdrawal within 7 calendar days prior to the 21 day commence date.

K. CONTRACTOR SUSPENSIONS AND DISQUALIFICATIONS:

The Housing Program Guidelines requires that the OCED only finance work with contractors who are qualified and reputable. Contractors may be suspended or

disqualified from participation in the OCED programs, for any of the following reasons, including but not limited to:

- a) Self imposed: A contractor may disqualify him/herself before contract signing for conflicting work contracts or personal hardship.
- b) Lack of Participation: If a Contractor does not participate or respond to an Invitation to Bid within a *twelve-month cycle* they will be placed on *Inactive Status* and no longer sent bid information. A contractor on Inactive Status must re-apply to be certified by the OCED.
- c) Insurance Violations: If at any time the Contractor fails to have required insurance, he/she will be automatically suspended until proof of insurance is provided to OCED. The Contractor must have valid insurance at all times. ***Any changes in coverage must be reported to the OCED and the Washtenaw County Purchasing Department in writing within five (5) working days of such change, including renewals.***
- d) Business License Violations: Any contractor who has a license suspended, revoked, rejected, or rendered inactive will be automatically disqualified. All license renewals must be current and a copy provided to the OCED. Any contractor working outside the scope of his or her license will be immediately suspended and possibly disqualified from participating in any rehabilitation/construction programs administered by the OCED.
- e) Failure to Honor Warranties: Any Contractor who fails to honor a warranty from a previous contract will be barred from future bidding for one year and must reimburse the OCED for any work contracted to correct the warranted work.
- f) Default: If a Contractor defaults or does not complete an assigned project, he/she will be disqualified immediately from participating in any rehabilitation/construction programs administered by the OCED.
- g) Willful Misconduct: Willful misconduct by the Contractor, his employees, or subcontractors while engaged on a project/work site will not be tolerated. The Contractor may be disqualified from the program for allowing such behavior. Such misconduct includes, but is not limited to theft, lewd or lascivious acts, foul language, public intoxication, and use of illegal drugs, willful destruction of owner's property or abusive behavior towards property owner or OCED staff.
- h) Contractor Negligence: Contractors that do not adhere to building codes, construction industry standards, contract specifications, and material requirements, will be dismissed and the contract will be completed by another contractor.
- i) Payment Delinquency: Failure to pay subcontractors or material suppliers automatically disqualifies the Contractor from the OCED programs.

- j) Kickbacks/Price Fixing: Any evidence of kickbacks or price fixing by or between Contractors, its employees, officers, owners, agents, partners, representatives or any other affiliates will automatically disqualify the Contractor indefinitely.
- k) Brokering of Work: No person or persons, shall broker any OCED Rehabilitation or Construction Contract to another licensed or unlicensed contractor. Anyone caught brokering work, or receiving a brokered contract will be immediately suspended and possibly disqualified indefinitely from participating in any rehabilitation/construction programs administered by OCED.
- l) Discrimination: Discrimination against, or denial of employment to, any individual in the performance of any rehabilitation contract on the grounds of race, sexual orientation, color, national origin, age, sex, handicap, belief, or political affiliation in violation of Title V and VII of the Civil Rights Act and the Age Discrimination in Employment Act.
- m) Collusion: Any activity, agreement or work performed outside the contract between the contractor and homeowner in which goods and or services are exchanged without the permission of the OCED. Side Projects: No Side projects are permitted to be established between the homeowner and the contractor prior to Contracts being signed, during the Contract term or 1 month following the project completion without the permission of OCED.

L. INSPECTIONS:

The OCED reserves the right to inspect all work performed by the Contractor(s). Unannounced progress inspections will be made by the OCED Rehabilitation Specialist during the rehabilitation/construction period to ensure all work is being performed to code and per the project specifications. The OCED Rehabilitation Specialist monitors the date of start-up and performs progress inspections on a regular basis. A scheduled inspection is required prior to receiving a draw request. The Contractor(s) may request an inspection 24 hours in advance by contacting the OCED Rehabilitation Specialist assigned to the project. The OCED Rehabilitation Specialist reviews the work status with the Homeowner and the Contractor(s) in order to remedy any developing problems and to ensure that both are satisfied with the rehabilitation/construction work. A progress inspection report may be written by the OCED Rehabilitation Specialist noting progress or the lack thereof and workmanship of the project. A copy of the progress inspection report shall be left on-site in the absence of the Contractor and/or their workers. Work, which is required to be inspected, must be left open until inspected. No framing,

mechanical, or electrical work will be closed until inspected by the Building Inspector or OCED Rehabilitation Specialist as needed.

M. PAYMENT OF CONTRACTORS:

Payments to the Contractor will be made by the OCED on behalf of the owner in accordance with the draw schedule outlined in *Section P (Draw Schedule)*. The Contractor is required to complete and submit a *Payment Packet* with all the necessary documentation fully completed to support the draw request to the Rehabilitation Specialist. Lien waivers must be signed and submitted by Contractors, sub-contractors, workers, and suppliers, before a draw request is released. ***This will be the case with every draw request, no exceptions.*** All work identified as completed on the draw request will be inspected by the Rehabilitation Specialist and/or an official from the Building Inspection Department if it includes any “permit required” work. The Homeowner’s signature is required on all applications for payment. Should the Homeowner fail to approve a payment request, payment may be withheld from the Contractor, until the OCED can investigate and determine the best course of action. ***Incomplete documentation could delay the processing of the Contractor payment. DO NOT CONTACT THE WASHTENAW COUNTY FINANCE DEPARTMENT; ALL REQUESTS REGARDING PAYMENTS SHOULD BE MADE TO THE OFFICE OF COMMUNITY AND ECONOMIC DEVELOPMENT.***

N. PAYMENT REDUCTION:

The Office of Community and Economic Development reserves the right to decline payment or reduce the amount of a draw to such an amount as is necessary to protect the Homeowner from loss or to recover the cost incurred to correct or complete the specified work because of, but not limited to:

- 1. Defective work not corrected.**
- 2. Third-party claims filed or reasonable evidence indicating probable filing of such claims.**
- 3. Failure of the Contractor to make proper payments to sub-contractors, laborers or material suppliers.**
- 4. The amount of work completed is not enough to constitute a draw.**

When the following conditions have been corrected or resolved, payments shall be made to the Contractor.

O. DRAW SCHEDULE:

The Homeowner shall agree to authorize payment to the Contractor in accordance with one of the following schedules:

Schedule A: Payment in full upon satisfactory completion of the entire project and submission of all required documentation. **This schedule is utilized for the following programs: Accessibility Ramps, Emergency Repairs, and Manufactured Home Repairs.** Payments will consist of one (1) draw request and be paid upon 100% completion of the project. **There will be no partial payments to the Contractor under these programs.** Please note that all punch list items must be completed and inspections required by OCED must be completed before any payment will be processed.

Schedule B: Progress payments based on the compensation of the Contract Amount and per the following scheduled stages of satisfactory completion. **This schedule is used for the following programs: Owner-Occupied Rehabilitation and Multi-Family Rehabilitation.** **Unless otherwise approved in writing,** payments will consist of three **(3) MANDATORY** draw requests against the total sum of the contract price. Payments will be based on the amount of work completed as described in the project specifications. The contractor shall submit requests for payment of completed work to the Rehabilitation Specialist or Housing Developer (whichever is applicable). Upon receipt of a Contractor's payment packet, the Rehabilitation Specialist and the Homeowner or Housing Developer must inspect the work and determine if it is acceptable. The rehabilitation specialist will attempt to inspect the items requested for payment within 72 hours of receipt of the fully completed payment packet. Please note that payments will not be authorized by the OCED Rehabilitation Specialist until the items identified on the request for payment by the Contractor have been inspected and approved. The Homeowner and/or Housing Provider shall sign off on payments to the Contractor upon satisfactory completion of the work, and inspection by the OCED Rehabilitation Specialist. Payments shall be made to the Contractor in three **(3) mandatory draw payments** as work is **completed, inspected, and approved** by the Homeowner and/or Housing Provider and the OCED Rehabilitation Specialist in accordance with the following **Draw Schedule:**

- ❖ **First Draw:** 40% of the contract amount upon completion of work
- ❖ **Second Draw:** 40% of the contract amount upon completion of work
- ❖ **Third (Final) Draw:** 20% of the contract amount upon completion of work

OCED will remit and process any requests for payment within 21 calendar days of approval by the OCED Rehabilitation Specialist and the Homeowner and/or Housing Provider; or state in writing its reasons for withholding a payment. Should the homeowner fail to file a written complaint within the required 10 calendar day time period specifying the work items and/or the nature of the work in question with an explanation why it was not approved, the OCED may not unreasonably withhold payment for work performed by contractors, where the work was performed appropriately and according to industry standards with the approval of the OCED Rehabilitation Specialist and a qualified Building Official if required.

P. PROJECT CLOSE OUT AND COMPLETION:

Final payment request inspections are conducted by the OCED Housing Rehabilitation Specialist. Upon completion of the work, a final inspection, signed by the Homeowner and the OCED Rehabilitation Specialist will be conducted. Final payments are processed in the same general manner as progress payments. *Authorization of a final payment will require:*

1. Inspection of the property by the OCED Rehabilitation Specialist to ensure that the work being billed is in compliance with the construction contract and local building code standards. If the work is found to be in substantial non-compliance, the payment amount will be delayed until compliance has been achieved.
2. The final payment amount will be calculated according to the contract provisions, and the final payment will then be processed. Prior the processing of the final payment, all lien waivers must be signed by all designated parties and given to the OCED Rehabilitation Specialist. The OCED Rehabilitation Specialist will retain this acknowledgement in the project files.

Q. LIEN WAIVERS and SWORN STATEMENTS:

The Contractor shall protect, defend, and indemnify the OCED and the Homeowner from all claims of unpaid work, labor or materials. The Contractor must submit a sworn statement and sign a Release of Lien prior to receiving payments. ***This will be required of the Contractor at every draw request, no exceptions will be made.*** Prior to final payment being made the Contractor's responsibility is to obtain and supply the OCED Rehabilitation Specialist with Release of Liens from its subcontractors, material suppliers, and any other affiliates associated with the project.

The Contractor shall submit a ***notarized Sworn Statement*** with each draw payment that all payroll, bills for materials and equipment, and other indebtedness connected with any work on the project for which the Contractor might in any way be responsible, have been paid or otherwise satisfied.

R. PROPERTY ACCESS AND SCHEDULING:

The Homeowner will provide the Contractor full access to the premises between the hours of 7:00 a.m. and 6:00 p.m. on weekdays unless alternative times are approved by the Homeowner. Prior to any work being done, the Homeowner will remove all personal property from the designated work areas. Property left in the work area will

be limited to normal amounts of furniture and appliances and personal property which can be stored in closets, dressers or cabinets. The Homeowner will permit the contractor to use, at no cost, existing utilities such as heat, electricity, and water necessary to carry out and complete the work. Failure to comply may cause the project to be discontinued at the Homeowner's expense. It is the Homeowner's responsibility to secure all pets during the inspection, write-up and rehabilitation process.

- a) The Contractor and/or sub-contractors must provide a minimum 24 hours notice to the Homeowner before the start of the first work day of a series of consecutive work days and if there is a break between work days, then the contractor needs to provide 24 hours notice to the Homeowner before the start of the next series of work days.

S. STORAGE:

The Contractor and subcontractors will be solely responsible for the security of their equipment, tools, and materials on the construction site. The Homeowner, Washtenaw County, its employees, or affiliates will not be held liable for any losses or damages sustained during the construction project. The Contractor will not store equipment and materials on said property that is not used for the work described in the contract.

T. PROPERTY DAMAGE:

The Contractor will be held liable for all property damage caused by his/her employees, equipment, tools, subcontractors, material supplies, or any other affiliates contracted by the Contractor to do business on the construction site. The Contractor shall make every effort available to avoid damages to the Homeowners property at all times. Any damage sustained to the property or its contents must be reported immediately to the OCED.

U. WORKMANSHIP STANDARDS

All work must be performed by mechanics, licensed, certified, and or skilled in their particular trade or task assigned to them. Work that does not adhere to this standard or is performed in an unworkmanlike manner shall not receive payment and shall be remediated as the OCED sees fit.

V. PERFORMANCE OF WORK:

The Contractor will be expected to reasonably staff the project on all working weeks of the project. *The only excusable exceptions will be for Acts of Nature, Acts of Government, and Acts of the Owner.* The Homeowner and the OCED Rehabilitation Specialist have the option of dismissing and replacing a Contractor for non-performance or for work delays not caused by Acts of Nature, Acts of Government, or Union Labor disputes. Additional cause for dismissal is failure of the Contractor to perform work

using construction materials of standard quality, free of defects, and failure to install materials per manufacturer's instructions and/or in a safe and workmanlike manner.

Monthly meetings between the homeowner, contractor, and the OCED may be scheduled to review the work and discuss the projects progress.

W. SCOPE OF WORK:

The Contractor agrees that he/she has prepared the bid proposal and that the contents are consistent and accurate as to the name of the Contractor, scope of work, and the price of the work. The Contractor acknowledges the performance requirements established in the work write-up and contract, and warrants that the work undertaken will conform to said specifications.

X. WARRANTIES:

The General Contractor shall furnish a limited *one (1) year warranty* on labor and materials from the date of final Inspection of all work performed under the contract. Manufacturers' and suppliers' written guarantees and warranties, covering materials and equipment, furnished under the contract shall be furnished to the homeowner. In instances where the living environment, lack of maintenance or damaged covered by homeowners insurance during the rehabilitation of the home, the warranty coverage will not apply. An example is where a pet has caused damage to door frames or siding.

Contractors warranty will be considered void if work performed does not meet manufactures specification.

Where materials or subcontracted work are covered by an extended warranty, copies of the warranty must be provided to the Homeowner during project closeout. The Homeowner is responsible to notify the Contractor first of any warranty claims during the Contractor's one-year limited warranty. The Homeowner shall notify the Contractor directly, and explain the problem to him/her and schedule a date and time for the contractor to correct the problem. If the Contractor fails to honor or respond to a warranty claim, the Homeowner may contact the OCED for assistance.

On Owner-Occupied Housing Rehabilitation projects, the Rehabilitation Specialist shall perform an inspection of the applicant's rehabilitated home **11 months after completion** of the rehabilitation work, to ensure that the work completed does not need warranty repairs. In an instance where a Homeowner will not allow access to perform the inspection, the Homeowner waives the right for any future inspection and follow up warranty work.

If a warranty issue should arise within one year, the Contractor is expected to respond within *72 hours for non-emergencies and within 24 hours for emergencies* to resolve the issue. If the Contractor fails to respond to a warranty issue, he/she will be disqualified

from the program for one year and must reimburse the OCED for any work contracted to correct the warranty work.

Y. GENERAL SPECIFICATIONS:

Contractors performing work for the OCED Housing Programs will adhere to the adopted "*Housing Program Guidelines for the Washtenaw Urban County*". Contractors are also expected to be familiar with, and to comply with, all applicable codes, written rehabilitation standards, bid specifications, and ordinances currently adopted by the local jurisdictions. In the event a conflict is determined to exist between the *All Trades Master Specifications for the Housing Programs* and the *Local Jurisdictions Adopted Codes*, the stricter of the two shall apply.

Z. DISPUTES:

All claims or disputes arising between the Homeowner and Contractor arising of or related to work shall be submitted in writing to the OCED within 10 days by either party. The Contractor shall carry on the work and maintain the progress schedule during any disputes, unless mutually agreed upon in a written statement by themselves and the Homeowner.

AA. INSURANCE REQUIREMENTS FOR CONTRACTORS:

The Contractor participating in the OCED Housing Programs agrees to carry adequate insurance coverage for liability, automotive and workers compensation as required by Washtenaw County and the City of Ann Arbor. Any changes in insurance coverage, including renewals and/or cancellations; must be provided in writing by the general contractor within ten (10) working days to the OCED. It is understood that any subcontractors hired or working with the Contractor must have adequate insurance coverage for liability and workers compensation. To execute a contract in connection with the OCED Housing Programs, a General Contractor must submit to the OCED a certificate of insurance from a satisfactory insurer(s) stating that the general contractor carries the types and amounts of coverage required for this program, as stated in ***Appendix C, Contractor Insurance Requirements. Washtenaw County and the City of Ann Arbor will be named as additional insured under the general contractor's liability coverage.***

BB. COORDINATION OF WORK:

The Contractor is responsible for the coordination of the work described in the contract. He/she agrees to schedule all work with a minimum of 24 hours notice to the homeowner within the proper order for the operation of all trades, material, and workers engaged in the project. It is agreed that no exterior work, such as roofing, will

be performed during adverse weather conditions that would cause damage to the Homeowners property.

CC. SUBCONTRACTORS:

The Contractor may utilize the services of only those Subcontractors who have not been disqualified under existing Federal and State regulations from participating in Federal and OCED assisted construction projects. All Contractors are responsible for registering their subcontractors with the OCED prior to the execution of the contract documents. Subcontractors shall be bound by the same terms and conditions as the general contractor, as applicable in the Contractor Guidelines. The General Contractor assumes full responsibility to the Homeowner and the OCED for the proper completion of all work to be executed under this agreement by themselves and their subcontractors; and they shall not be released from this responsibility by a sub-contractual agreement they may make with others.

DD. PERMITS:

The General Contractor and his or her sub-contractors will secure, at their own expense, all necessary permits required to perform the work as described in the contract. No work may be started on any housing rehabilitation project until the proper permit(s) have been issued. No payments will be issued until all applicable permits and final inspection certificates have been submitted to the OCED Rehabilitation Specialist.

EE. PROGRESS SCHEDULE:

The Contractor after the execution of the contract agreements; shall prepare and submit for the approval of the OCED Rehabilitation Specialist an estimated weekly progress schedule for work. This schedule shall indicate the dates by week for the start and completion of the various stages of construction and shall be revised as required by the conditions of the work. No payments will be authorized until the progress schedule has been submitted to the OCED Rehabilitation Specialist.

FF. CODES:

The Contractor will comply with all building code regulations, laws and ordinances required by federal, state, and local units of government, as well as the OCED. The Contractor will not be held responsible for pre-existing violations of code or building laws except where corrections of such violations are required within the scope of the contract. It is the Contractor's responsibility to stay informed of all changes to the current State of Michigan building code and local ordinances.

GG. LICENSES:

A current copy of the Contractor's and Subcontractor's business and/or trades license must be on file with the OCED. Any changes, including renewals, must be submitted within ten (10) working days of such said change. Any violations or discipline against the Contractor must be reported in writing to the OCED within five (5) working days.

HH. LEAD-BASED PAINT OVERVIEW:

In accordance with the HUD Lead-Based Paint Regulation (24 CFR Part 35), rehabilitation work on housing built before 1978 that is financially assisted by the Federal government is subject to requirements that will control lead-based paint hazards. At the very least, we will repair any painted surface that is disturbed during our work. We may stabilize deteriorated paint, which includes the correction of moisture leaks or other obvious causes of paint deterioration. We will have a clearance examination conducted following most work activities to ensure that the work has been completed, that dust, paint chips and other debris have been satisfactorily cleaned up, and that lead dust hazards are not left behind. As necessary, we will conduct a risk assessment to identify lead-based paint hazards, perform interim control measures to eliminate hazards that are identified or, in lieu of a risk assessment, perform standard treatments throughout a residence. The type and amount of Federal assistance and rehabilitation hard costs for the unit will determine the level of lead hazard reduction we will complete.

Contractors will submit a list to the OCED of all individuals and subcontractors that will be involved in each project stating that each has completed a HUD approved training course on Lead Safe Work Practices.

II. REDUCTION OF LEAD-BASED PAINT HAZARDS:

All lead-based paint activities performed, including waste disposal, shall be in accordance with applicable Federal, State, or local laws, ordinances, codes or regulations governing evaluation and hazard reduction. The use of paint containing more than 0.06 percent dry weight of lead on any interior or exterior surface is prohibited. The Contractor agrees to hold the OCED and the Homeowner harmless in the event of any fines from federal or local agencies controlling the lead hazard reduction work.

All workers involved in lead hazard reduction activities must either be supervised by an EPA or State of Michigan Abatement Supervisor or have received HUD-approved training in lead-safe work practices prior to commencement of work. Actions must be taken to protect occupants from lead-based paint hazards if the unit will not be vacant during the rehabilitation project. ***An Occupant Protection Plan must be filed in accordance to state regulations prior to the start of the rehabilitation work.*** Occupants may not enter work site during lead hazard reduction activities. Re-entry is permitted

only after such activities are completed and the unit has passed a clearance examination. The worksite shall be prepared to prevent the release of leaded dust, and contain lead-based paint chips and other debris from hazard reduction activities within the worksite until they can be safely removed. Practices that minimize the spread of leaded dust, paint chips, soil and debris shall be used during worksite preparation. All objects that cannot be moved (cabinets, appliances, built-in furniture) shall be covered with plastic sheeting at least 6 mils thick taped securely in place. Floors in the worksite shall also be covered with plastic sheeting at least 6 mils thick and sealed with tape.

The Contractor shall keep the premises clean and orderly during the course of the work and all debris shall be removed on a continuous daily basis and not be allowed to accumulate. All exposed interior surfaces shall be cleaned using a HEPA vacuum and wet washed with a detergent solution and clean water rinse to reduce the lead content. Clearance may not be performed sooner than one hour after completion of the final cleanup

JJ. CLEARANCE EXAMINATION

Using a trained and certified lead paint inspector, a lead hazard risk assessor, or if approved, a sampling technician, one hour after completion of all lead hazard reduction, renovation and maintenance work, conduct a visual assessment for evidence of remaining paint chips, visible dust debris and residue. Randomly select four (4) floors, two (2) window sills and two (2) window troughs to dust wipe test as per protocol in the HUD Guidelines. Submit the dust samples, plus a blank sample, to an EPA-accredited lead analytical laboratory for determination of lead content. Provide the owner, occupants and this agency with the clearance report and a "Notice of Lead Hazard Reduction" within 15 days of achieving final clearance, in accordance with 23 CFR Part 35.

**** The Office of Community and Economic Development will only pay for passed clearance examinations. The contractor shall be responsible for the repayment to Community Development for all failed clearance examinations. ****

KK. MATERIAL QUALITY:

The Contractor must furnish all materials necessary to complete the contract. All materials used and installed must be at a minimum, mid/contractor grade, new and of quality as specified in the work write-up. Any materials used other than what is in the work write-up, must have written approval by the OCED Rehabilitation Specialist before installation. All materials used by the Contractor are subject to uncovering and inspection. ***The Contractor shall obtain written approval from the OCED Rehabilitation***

Specialist before using products, models, brands, or materials intended as “approved equals”. No payment will be authorized until all issues regarding the use of unauthorized materials have been resolved.

LL. LABOR QUALITY:

All labor furnished by the Contractor or Sub-contractor must be executed by skilled, licensed tradesmen and/or craftsmen. All work performed by the Contractor will be inspected by the OCED Rehabilitation Specialist and is expected to conform to the contract, building codes and professional work ethics. The Contractor shall not employ on the project any unfit person or anyone not skilled in the task assigned to him/her.

The Contractor, if not in person at all times, shall employ a competent superintendent who shall be in attendance at the project site during the progress of the work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. A copy of the contractor’s designee/authorized signer should be submitted to the OCED Rehabilitation Specialist.

MM. PERSONAL PROPERTY:

Personal property belonging to the Homeowner that remains on the construction site shall be protected and preserved throughout the duration of the project. The Contractor shall hold harmless the Homeowner and the OCED for damages created by the Contractor, or his/her affiliates, during construction. At no time shall any of the Homeowner’s personal property or furniture be stored outdoors unless it is stored in an appropriate, lockable container.

NN. SAFETY:

The Contractor agrees to keep the construction site a safe working environment at all times. All trash and debris will be removed during the course of work, as well as tools and equipment when applicable, to ensure safety for the workers and Homeowner. Chemicals and flammables such as paints and solvents shall be removed daily, or locked in a secure location, to prevent accidents.

OO. SITE CLEAN-UP:

The Contractor agrees to keep the construction site cleared of trash and construction debris, cleaning the site on a daily basis. Contractor will provide a dumpster or other approved receptacle at his/her cost. The site must be cleaned up each evening before

going home and the Homeowner must be left with at least one (1) working bathroom at all times.

PP. CHANGE ORDERS:

The Contractor agrees that no alteration of costs, materials or labor described in the original work order shall take place unless in writing and mutually agreed upon by the Homeowner, Contractor, and the OCED Rehabilitation Specialist. All changes must be in the form of a *Change Order* signed and dated by the Homeowner, Contractor, and the OCED Rehabilitation Specialist. Any changes made will be bound by the contract and incorporated into the project; subject to the same requirements, policies and procedures as described above. All changes must be approved by the OCED Rehabilitation Specialist before work commences. This means that any work done by the Contractor or arrangements made by the Homeowner prior to executing a written change are unauthorized and non-binding. Payments for any unauthorized work completed without an executed change order will not be processed by the OCED. Regardless of the situation, the only protection for both the Homeowner and the Contractor is to have all changes executed in writing by the OCED.

Change orders are also required for extensions of time. Extensions of time will only be granted for additional work that is not listed in the construction work order or delays caused by the actions of the homeowner and/or OCED. The Change Order is not effective until signed by all parties indicated in the previous paragraph.

QQ. HOLD HARMLESS:

The Contractor shall agree to defend, indemnify, and hold harmless the Homeowner and the OCED from liability and claim for damages because of bodily injury, death, property damage, sickness, disease, theft, or loss and expense arising from the Contractor's performance under this agreement to provide construction services to be paid for out of the proceeds of the Homeowner's rehabilitation loan. The Contractor is acting in the capacity of an independent Contractor with respect to the Homeowner.

Appendix A

ALL TRADES MASTER SPECIFICATIONS

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DEFINITIONS

ABR: Architectural Barrier Removal

ADA: Americans with Disabilities Act

Code: Currently adopted Community Development codes, ordinances, local amendments, and All Trades Master Specifications

Hot Water: Water supplied to plumbing fixtures at a temperature of not less than 110 degrees F.

I.C.C.: International Code Council

MUEC: Michigan Uniform Energy Code – 2003 edition

IFC: INTERNATIONAL FIRE CODE – 2006 edition

IFGC: INTERNATIONAL FUEL GAS CODE – 2006 edition

IMC: INTERNATIONAL MECHANICAL CODE – 2006 edition

IPC: INTERNATIONAL PLUMBING CODE – 2006 edition

MRC: MICHIGAN RESIDENTIAL CODE – 2006 edition

MICHIGAN BUILDING CODE: 2006 EDITION

Minimum Inspection Standards: All properties shall be inspected in accordance with applicable minimum housing standards as provided for in the Office of Community and Economic Development adopted codes, and the Dept. of Housing & Urban Development Property Standards as defined by the 24 CFR, Chapter 200, Subpart 925., Locally adopted, written, minimum housing standards, general specifications. In the event of a conflict, the stricter shall apply

NEC: NATIONAL ELECTRICAL CODE – 2006 edition adopted by the Office of Community and Economic Development 9-1-04

O.C.: On center

O. C. E. W.: On center, either way

O.D: Outside dimension

Workmanship like Manner: Work should be completed to the standards of the applied craft or trade

0:1 REHABILITATION STANDARDS APPLICABLE TO ALL RESIDENTIAL REHABILITATION

The following conditions, pre-existing or allied with work required by the write-up, shall be included and satisfactorily completed as a part of the rehabilitation requirements.

- a. Collect and remove from project all trash and rubbish in open yard area; leave in rake clean condition.
- b. Demolish and remove from project all specified items including but not limited to deteriorated, dilapidated, and unsightly items such as fences, sheds, barns, garages, etc.
- c. Tree limbs, shrubs, brush, etc. shall be removed or shall be trimmed a minimum of three (3) feet from structures to prevent future damage to structure.
- d. Tree limbs, etc. shall be trimmed a minimum of five (5) feet from any roof surface to prevent future damage.
- e. All penetrations of the floor from basement less area must be satisfactorily closed by tight fitting collars around pipes, vents, ducts, etc., caulking will be permitted if not over 3/16" around penetrating member or 3/16" cracks and voids. Closures of the above shall prevent the entrance to the living unit of insects, vermin, etc. (See Spec. 12:6 Caulking application).
- f. All penetrations of the foundation skirt, exterior walls, gables, etc., shall be satisfactorily closed as above to prevent the entrance to the living unit or attic space of insects, vermin, etc. and to prevent entrance of water and provide protection by eliminating exposure to weather. (See Spec. 12:6 Caulking application).
- g. Smoke detectors/carbon monoxide detectors shall be installed in accordance with the MRC as currently adopted by the OCED to include local amendments.
- h. On all projects, all outlets located in a bathroom or kitchen that is within 6 feet of a water source shall be replaced with a GFCI outlet device. All exterior or wet-location outlets shall also have GFCI protection

1. FOUNDATION

1:0 GENERAL REQUIREMENTS

Foundation repair or replacement shall be accomplished in a workmanlike manner. Any work requiring skirt removal or closure and/or pier and footing work, also requires that all stored, unused, items, etc. shall be removed from the basement-less area. All shims and/or blocking shall be nailed, strapped, or otherwise securely fastened to the supporting members of the structure. Existing wood, masonry, and/or concrete piers that are sound and plumb are not to be replaced or removed. Masonry piers may be repaired if feasible.

All foundation repairs shall be engineered. Foundation repairs shall be scheduled as the first item to be repaired unless otherwise noted in the bid document/work write-up. Prior to repairing the foundation, the contractor shall test the water and sewer lines and provide the results to the Local Building Department and the OCED have been completed, the contractor shall test the water and sewer lines to ensure they have not been compromised. Prior to any other work commencing, the contractor shall provide the Local Building Department and the Office of Community and Economic Development with the results of the hydrostatic test.

1.1 LEVELING - Shall be completed in such a manner as to be permanent. Shims and/or blocking shall be fastened and wedged tight, and of an approved material that is treated to prevent insect damage or deterioration. Any damage to the structure as a result of the leveling operation is to be repaired or replaced, including but not limited to plumbing, doors, floors, partitions, etc. All piers and/or footings damaged shall be replaced with new.

1.2 FOOTINGS & PADS - Replacement for perimeter shall be engineered.

1.3 PIERS - Replacement for piers shall be engineered.

1.4 MASONRY PIERS, EXISTING - Repair or replacement of masonry piers shall be engineered.

1.5 SKIRTING - Repair existing to a serviceable condition. If new, shall be constructed of conforming materials and if wood, shall be provided with minimum 8", 16 gauge galvanized ground flashing with 2" overlap under bottom of skirt and extending into the ground. Wood siding shall be a minimum of 4" from revised ground grade. Should plaster and expanded metal be used, no ground flashing is required. Completed skirt of plaster shall extend 4" below revised finished ground grade. Use vertical reinforcing rods, minimum 3/8" diameter, adequately fastened to sill, extending into ground 4", spaced a minimum of 16" o.c. Plaster shall be minimum 3/4" thick. Metal expanded lath shall be diamond mesh wt. 2.5 lbs. per SQ YD, securely fastened by galvanized wire ties not over 8" o.c. Two plaster coats required. Scratch coat to be 1 part Portland cement, 1 part masonry cement, 3 parts plaster sand. Finish or brown coat shall be same as above except 4 part sand. Allow minimum of 48 hours between coats, trowel applied with uniform brush finish.

1.6 CREEPHOLE DOOR - Shall be hinged and constructed of such material as to conform to foundation skirt. New or existing openings shall be a minimum size of 18"x 24" or adequate size for servicing of equipment and with a means to latch. Conditions may require a masonry or concrete sill to divert surface water away from structure. If not feasible on exterior, locate within interior floor area, accessible for maintenance of plumbing below floor.

1:7 VENTS - If new, shall be louvered, rust resistant metal or vinyl, and substantially weatherproof. Install weather tight and properly spaced to provide adequate cross ventilation under structure. Standard vents, size 16"x 8" (65 SQ IN free air, .45 SF).

1:8 SILLS, FLOOR FRAMING - Replace or repair all rotted or deteriorated pieces with same size and dimension. Material shall be preservative treated #2 Yellow Pine.

1:9 FLOOR JOISTS - Repair existing. If new, shall be a minimum of 2"x 6" and/or standard construction grade of existing dimension lumber, adequate to support load, supported at their extreme ends by either a 2"x 4" ledger or metal joist hanger. (Same material as Spec. 1:8)

1:10 EXTERMINATION - Should existing conditions indicate infestation; select a treatment plan as recommended and applied by a bonded exterminator. This preventive measure is with regard to termites or other destructive insects, etc. Exterminator's certificate is required. Application and treatment is to be within and/or also outside basement-less area, unless otherwise specified.

1:11 STABILIZE FLOORS - Provided existing piers, beams, and footings are in acceptable condition, replace or tighten and fasten shims to satisfy floor and structure conditions. Shims shall be of treated material to prevent insect damage and/or deterioration and nailed or otherwise fastened to supporting or carrying members.

2. WALLS (Exterior)

2:1 WOOD WALL STUDS - Repair existing. If replaced, studs shall be a minimum of 16" o.c., 2"x 4"x 92-5/8" SPF or written approved equal and conform to existing wall framing.

2:2 REPAIR ASBESTOS SIDING - Contractor shall take all appropriate measures mandated by the State of Michigan. Replacement shall be of a reasonable conforming pattern, type, and color. If unable to match color, the replacement material shall be painted to match existing.

2:3 VINYL SIDING- Installation of new shall be double 4" clapboard, wood grain finish, .040" thick, over 1/2" rigid foam insulation board on all exposed sided surfaces; wrap fascia and all wood trim boards with aluminum. Vinyl siding must provide a limited lifetime warranty and be certified by the Vinyl Siding Institute.

2:4 REPAIR COMPOSITION SIDING - Replacement shall be of a reasonable conforming pattern, type, and color. Asphalt minimum weight 105# per square, insulated composition minimum weight 225# per square.

2:5 STRAIGHTEN WALLS - Walls shall be re-aligned by removing necessary wall covering (either exterior or interior) in order to align wall framing to a reasonable, straight, and even plane. Replace such structural members as required and adequately brace. Reinstall siding and other components in a workmanlike manner.

2:6 WOOD SIDING AND TRIM - Repair existing to a satisfactory watertight condition. New wood siding shall be of a reasonable conforming pattern, type, and color. Bird boards and corner boards shall adequately close all openings to a reasonably tight fit. Exterior trim shall be preservative treated lumber where contact with water is likely, otherwise #2 SPF, free of loose knots and splits. Fasteners must be non-corrosive, galvanized nails.

Replacement of siding - All wood siding shall be grade D or equivalent. Siding shall have a minimum thickness of 3/8 inch unless placed over sheathing that has an I.C.C. approval. Siding patterns known as rustic, drop siding, or shiplap shall have an average thickness of not less than 3/8 inch. Bevel siding shall have a minimum thickness measured at the butt section of not less than 7/16 inch and a tip thickness of not less than 3/16 inch. All weatherboarding or siding shall be securely nailed to each stud with not less than one nail or to solid 1 inch nominal wood sheathing or 1/2 inch plywood sheathing with not less than one line of nails spaced not more than 24 inches O.C. in each piece of weatherboarding or siding. All fasteners used for the attachment of siding shall be of a corrosion-resistant type. All vinyl, aluminum, or steel siding soffit and coil stock must be I.C.C listed and installed according to manufacturer's installation instructions.

3. PORCHES

3:1 REMOVAL - of deteriorated, dilapidated, porches, stoops, etc., which are not economically feasible to repair, shall be done in such a manner as to cause a minimum amount of damage to the remaining structure. After removal, repair, bracing and strengthening of main structure shall be provided. Finished floors must slope to drain away from main structure.

3:2 REPLACE WOOD FLOORING AND CEILING - Repair areas of existing. New flooring shall be of tongue and groove type, and preservative treated to prevent deterioration. Ceilings shall be repaired with matching materials. If new, shall be BCX plywood, 3/8" minimum thickness. (See Finish 9:4)

3:3 WROUGHT IRON OR PIPE COLUMNS - Repair existing. Should replacement be required, shall be new to match existing and/or sized to provide structural strength for intended use. (See Finish 12:8)

3:4 WOOD COLUMNS - Repair existing. If new, shall be a minimum of 4"x 4" dimension and shall extend from porch floor continuously to bearing beam. Base shall be satisfactorily caulked to weather seal. (See Finish 12:0) Replacement column shall reasonably match existing and be cased if required. Supports must be sized to provide structural strength for intended use.

3:5 CONCRETE PORCH - Repair existing. If new, shall have a compressive strength at 28 days of at least 3000 PSI. Concrete will be deposited when temperature is at 40 degrees F or above and rising, and shall be reinforced with minimum 6x6-10/10 wire mesh. If steps are called for they are to be poured monolithically. Pre-cast concrete steps are acceptable as called for in Spec 3:7. New porches and steps must slope away from main structure and properly drain.

3:6 STOOPS - Repair existing. If new, are to be constructed of such material as to conform to existing roof covering and shall have all necessary structural members required to form a structurally sound unit. Metal, aluminum stoops may be provided only with approval of administrating agency.

3:7 STEPS, RAMPS, CONCRETE - Repair existing. If new, must be poured in place concrete, with concrete reinforcing and conditions as called for in 3:5. Pre-cast concrete steps shall be a satisfactorily sound unit. Metal, aluminum stoops may be provided only with approval of administrating agency.

3:8 HAND RAILS - Wood, iron or pipe. Repair to match existing. If new wood, use pressure treated lumber, balusters minimum 5" o.c., firmly attached with lag bolts to house with newel post set in concrete for firm support. Galvanized pipe, minimum 1-1/2" may be repaired or used as replacement for existing. Wrought iron replacement is to be used only as matching replacement for portion of existing.

Handrails shall be required for stairways having two or more risers which serve one individual dwelling unit. Handrails shall have maximum heights not less than 34 inches nor more than 38 inches from the nosing of threads, shall be provided on at least one side of stairways, and shall be continuous the full length of the stairs and extend not less than 6 inches beyond the top and bottom risers. The handgrip portion of handrails shall be not less than one and ¼ inch nor more than two and 5/8 inch in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners.

3:9 RESCREEN - Repair existing. If new, it is required that the screening materials shall be new aluminum wire, 18/16 mesh, uniformly applied with adequate tension to prevent sagging or wrinkles.

4. YARD

4:1 WALKS, ENTRANCE - Existing lead walks of concrete not within public right of way shall be repaired. If replaced, the minimum width shall be 36" and minimum thickness of 4". Walks shall be reinforced with 6x6-10/10 wire mesh. Concrete shall have a compressive strength at 28 days of at least 3000 PSI. Concrete will be deposited when temperature is at 40 degrees F or above and rising. Finish grade shall adequately drain. Use medium broom finish and expansion joint of ½" asphalt fiber at junction with structure and lateral walk and every 50', control joint every 4', edges to be tooled.

4:2 DRIVEWAYS - Existing concrete driveways not in public right of way may be repaired or replaced and shall be reinforced with 6x6-10/10 wire mesh, with expansion joint material placed at maximum of 30', not to exceed 200 SQ FT in one area. Concrete shall have a compressive strength at 28 days of at least 3000 PSI. Concrete will be deposited when temperature is at 40F or above and rising. Driveway shall cover a minimum area of 10'x 20' for off street parking. Approach and walk area is not to be included in the minimum area required. Medium brush finish required minimum 4" thick.

4:3 DRIVEWAYS GRAVEL - Existing gravel driveways may have new gravel added if necessary. Minimum area covered shall be same requirements as 4:2. Gravel to be satisfactory road gravel with adequate binder characteristics or stabilized with 20 lbs. of cement uniformly mixed with each square yard of 6" thick gravel. Place and compact gravel to uniform grade to obtain adequate drainage.

4:4 GARAGE DETACHED OR ATTACHED - If existing and feasible to repair, shall be eligible only for items of exterior rehabilitation as determined by administrating agency. Dilapidated structures shall be removed and not replaced.

4:5 STORAGE DETACHED OR ATTACHED - If existing and feasible to repair, shall be eligible only for items of exterior rehabilitation as determined by administrating agency. Dilapidated structures shall be removed and not replaced.

4:6 CARPORT DETACHED OR ATTACHED - If existing and feasible to repair, shall be eligible only for items of exterior rehabilitation as determined by administrating agency. Dilapidated structures shall be removed and not replaced.

4:7 FENCE - Repair existing if economically feasible. Replace small deteriorated portions as determined by the administrating agency. Remove all of dilapidated fencing not economical to repair.

4:8 CLOTHES POSTS & LINES - Repair. Replace existing deteriorated portion as determined by the administrating agency to match existing.

5. ROOF

5:0 GENERAL REQUIREMENTS - Repair or re-roofing shall be accomplished in a workmanlike manner, and shall be done in accordance with manufacturer's recommendations as well as local building code and installed in such a manner (with proper flashing, counter flashing, and all other necessary components) as to prevent leaks of any kind.

5:1 LEVEL - Install sufficient bracing to ridge, gables, and rafters to support to a reasonable line and level in order to maintain a true and even plane. **5:2 DECKING**- Repair existing by replacing defective sheathing boards, leaving new deck surface smooth, clean, and adequately secured to structural members. Nails to be 8d common or box for shiplap and all other 1"x 4" materials, and 6d spiral thread or ring-shank common or box nails for plywood or OSB sheathing, 6" o.c. along all edges and 12" o.c. along intermediate members. Sheathing shall be ½" CDX plywood or 7/16" OSB installed with plywood "H" clips.

5:3 GUTTER AND DOWNSPOUT - If existing, shall be replaced with new parts of 26 gauge aluminum, install ¼" screen to prevent entrance of foreign materials, supply a concrete splash block under downspouts to prevent erosion of soil around outlet. Adequate hangers, braces and bands shall be securely anchored and drainage shall be such as to eliminate ponding, minimum 1/16" per foot of fall. Finished installation shall be free of leaks, and shall control disposal water to prevent damage to property.

5:4 REPAIR GUTTER AND DOWNSPOUT - Realign and adjust all supporting members. Minimum uniform grade shall be 1/16" per foot. Repair all solder joints with same. Replace missing parts and hangers and braces with minimum 26 gauge galvanized metal.

5:5 NEW FLASHING AND VALLEY - Shall be 26 gauge galvanized metal. Valley metal shall be a minimum of 20" wide. Roll roofing for a valley is required with composition shingles, minimum 90# or as recommended by manufacturer.

5:6 REPAIR WOOD SHINGLES - Replace all missing and split wood shingles with No.2 red cedar.

5:7 REPAIR COMPOSITION ROOF - All missing or broken shingles shall be replaced. Re-nail all loose shingles. Replacement shall be of similar color, design, and brand (if possible), as existing roofing material.

5:8 NEW COMPOSITION ROOF - Apply minimum 220#, 3-tab, Class A fiberglass composition roof, 25 year warranty, with 1-1/4" galvanized roofing nails over 15#

asphalt felt paper. Prior to starting work, examine roof deck on which work is to be applied for defects in material and workmanship which may be detrimental to the proper installation or long-term performance of the shingles. Install according to manufacturer's recommendations. Install 1-1/2"X1-1/2" metal edging over all exposed drip edges of roof, new stack/vent boots and proper flashing. Provide for adequate ventilation by installing ridge vents or turbines according to work write-up.

5:9 NEW COMPOSITION ROOF OVER OLD- Prohibited

5:10 BUILT UP ROOF REPAIR - Shall be dead level or steep run asphalt as required by existing conditions. Remove aggregate spud off loose roofing material, cut blisters and re-nail. Hot mop minimum of two (2) plies of 15# asphalt coated felt then flood coat and apply roofing gravel to a uniform durable surface. All penetrations such as vents, chimneys, etc. shall be adequately flashed with metal or mastic and membrane in accordance with good roofing practice. Repair existing or furnish new metal gravel guard.

5:11 NEW BUILT UP ROOF OVER OLD - For roof slopes of 2 in 12 or less, install two (2) plies of 15# felt properly mopped with hot asphalt. (See Spec. 5:10 for application, flashing, etc.)

5:12 NEW BUILT UP ROOF, COMPLETE TEAR OFF OF EXISTING - Nail one (1) ply of 30# felt. Mop minimum of two (2) plies of 15# felt and flood coat exposed surface (See Spec. 5:10 for application, flashing, etc.). Prior to any application to new, repaired, or existing wood deck; remove loose nails, old roofing nails, re-nail and repair deck as required.

5:13 RAFTER TAILS, REPAIR OR REPLACE - Remove deteriorated portion of exposed rafters; replace with new material to match existing rafters. Method of repair shall adequately support roof eaves and/or overhang, and be neat in appearance without cleats unless being cover with vinyl or aluminum.

5:14 BARGE RAFTERS, REPAIR OR REPLACE - Remove deteriorated portion of barge rafter and repair. (See Spec. 5:13). Repaired portion or replacement shall be securely fastened to deck overhang and shall be of straight #2 SPF or better. Repair shall be neat in appearance and without cleats.

5:15 CORNICE, FASCIA, SOFFIT, DRIP MOLDING, AND/OR TRIM - Replace rotten or deteriorated sections by installing new material using #2 grade lumber of correct dimension to conform to existing components. Soffits shall be repaired with matching materials. If new shall be BCX plywood, 3/8" minimum thickness. (NOTE: lower grades of replacement material may be used, upon approval, when being covered with vinyl or aluminum)

5:16 ROLL ROOFING - For low slope roofs of under 1 in 12, material shall be mineral surface 90#, applied in accordance with manufacturer's specifications.

6. DOORS

6:0 GENERAL REQUIREMENTS - All doors shall operate satisfactorily and be in sound serviceable condition. All doors must have a wall mounted door stop, strike plate, lockset, and appropriate hinges. All exterior doors and frames shall be substantially weather tight and rodent proof. Doors shall clear carpet by ½".

6:1 EXTERIOR DOORS - New shall be pre-hung metal clad 1-3/4" insulated door complete with entry lock and deadbolt keyed alike, weather-stripped threshold, peep sight, jamb weather stripping, and interior/exterior casing. Install plumb and level to ensure proper operation. If economical, existing doors shall be repaired to satisfy security and weather protection requirements and properly fit opening. Re-adjust and/or replace stops to provide a reasonably tight fit.

6:2 FRAME - Repair existing frames if feasible; if new shall be of 2" material with a properly plowed jamb and stops to receive a 1-3/4" door.

6:3 THRESHOLDS, INTERIOR - Shall be of new wood of proper height and width for the particular opening, and suitable for interior use. Install to a reasonable clearance of ¼" maximum.

6:4 ALL NEW OPENINGS - Repair if feasible; if new, shall be properly framed with a minimum of two #2 Yellow Pine or SPF 2"x 6" headers with ½" spacer, installed on edge, where all bearing loads exist; dimension of lumber used shall be sufficient to bear load according to size of opening. All non-bearing loads shall be constructed with two #2 Yellow Pine or SPF 2"x 4" headers with ½" spacer, placed on edge, not to span an opening over 3' in width. If new opening is located in a load-bearing wall, permits shall be required.

6:5 REMOVE AND CLOSE OPENING - After removal, structure shall be properly braced and strengthened and openings shall be covered with conforming exterior and interior finish materials in such a manner as to remove evidence of closing.

6:6 STORM DOORS - If economical - shall be repaired. Re-adjust or replace stops for a reasonable tight fit and insect proofing. If new, vinyl-clad over wood core, mill-finished aluminum, or aluminum with baked on enamel finish, tempered safety glass window, interchangeable screen for top and bottom ventilation, weather-stripped, with push button handle, adjustable pneumatic closer, safety chain and slide on expander sweep.

6:7 WOODEN SCREEN DOORS - If economical shall be repaired. If new, shall be of selected preservative treated Western Ponderosa Pine with dowel joint construction and furnished with 18/16 mesh aluminum screen wire. Minimum thickness of 1-1/8". Re-adjust or replace stops for reasonably tight fit to ensure protection from rodent and insect infiltration. Provide spring latch, closure and one pair 3"x 3" butt hinges.

6:8 RE-SCREEN DOORS, ALUMINUM, WOOD - All doors shall be screened with 18/16 mesh aluminum screen wire. Mesh shall be uniformly applied with adequate tension to prevent sagging or wrinkles. Screening for wood doors shall be provided with new screen mold unless existing is in good repair and free of breaks, cracks, splinters, and are continuous one piece sections. Screening for aluminum doors shall meet above requirements for wood except that all **splines** shall be tight-fit one piece sections and replaced if deteriorated (See 6:9 for hardware).

6:9 DOOR HARDWARE, EXTERIOR - Repair existing if economically feasible. New hardware for doors to be a keyed entry lockset with 1/2" throw and a deadbolt with 1" throw, keyed cylinder outside, thumb turn inside including escutcheon trim and strike plates, keyed alike.

Finish hardware – All exterior door locks shall be of Schlage brand or equivalent. All deadbolt locks shall be keyless from the inside. All exterior door hinges shall be a minimum of three and 1/2 inch x three and 1/2 inch in size, with a minimum of two hinges to each door.

6:10 THRESHOLD FOR DOORS - Shall be extruded aluminum, minimum of 3-3/4" wide with 3/8" high vinyl insert. If non-existing or if existing is not an effective seal, provide and install new threshold to manufacturer's printed instructions. For thresholds that do not have vinyl inserts on base, both long edges must be installed with continuous bead of caulking.

6:11 DOOR WEATHER STRIP - shall have extruded aluminum housing 1/4"x 1/2" with vinyl, neoprene 3/16" bulb insert. If non-existing or if existing is not an effective seal then, after adjustment of stops (if required) and painting, provide and install new weather strip continuous at both jambs and head. Install with screws or nails as provided by manufacturer and to manufacturer's installation instructions.

6:12. INTERIOR DOORS - If economical shall be repaired. If new, doors shall be pre-hung interior standard grade flush or panel type, hollow-core units, minimum thickness 1-3/8", installed with passage lockset, casing trimmed with minimum 2" wide paint grade molding on both sides. Bathroom doors shall have privacy lockset.

All new interior passage locks shall be of a Schlage brand or equivalent, and shall match as closely as possible to the existing locks. All interior door butts shall be a minimum of three inch x three inch in size, with a minimum of two hinges to each door. All cabinet

hardware shall be a polished, finished material, and properly fitted as required for the particular use.

6:13 CASING REPLACEMENT - Repair if economically feasible. If new, shall match existing for doors and/or windows of #2 SPF or better and be free of loose knots, cracks or splits. Apply with finishing type nails, countersunk with nail holes filled.

7. WINDOWS

7:0 GENERAL REQUIREMENTS - Every exterior window shall be substantially weather tight, water tight, rodent proof and in sound serviceable working condition with latches and insect screens and shall be cleaned of paint, putty or caulking.

7:1 WOOD UNITS - Repair if economically feasible. If new, shall be constructed of type "S" or "T" stiles, double-hung, check rail or plain rail. Material shall be of preservative treated Western Ponderosa Pine. Minimum thickness of 1-3/8". Furnish with SSB glass. Unit shall be watertight, properly fit the opening, and operating sash shall be properly weather stripped with lock.

7:2 ALUMINUM UNITS - If economical shall be repaired. If new, shall be Energy Star compliant, single hung, double glazed, low-e, white finished aluminum with sash locks. Exposed surfaces of all aluminum members shall be extruded of first class finish material with no serious defects or blemishes. All joints shall be neatly fitted, secure, and made water/air tight. Operating sashes are to be properly weather stripped to minimize entrance of air and moisture. Provide window screens. Furnish with SSB glass.

7:3 VINYL UNITS - New shall be Energy Star compliant, single hung, double glazed, low-e units with tilt sash and lock. Sash frame shall be miter cut and fusion welded at the corners, extruded vinyl compound that doesn't chip or peel. Install plumb and level to ensure proper operation. All joints shall be neatly fitted, secure, and made water and air tight. Provide window screens.

7:4 WOOD WINDOW SCREENS - If economical shall be repaired. If new, wood screens shall be constructed of 3/4" material; header and sides shall be minimum of 2" in width, base shall be minimum of 3" in width and shall be properly doweled at joints; screen wire shall be 18/16 mesh aluminum. All screens shall be full screens properly fit to openings.

7:5 ALUMINUM WINDOW SCREENS - If economical shall be repaired. If new, aluminum screens shall be of standard design and construction with a minimum cross rail and frame width of 1/2" and thickness of 3/8" wired with 18/16 mesh aluminum wire. All window screens shall be half screen for single-hung, and full for double-hung, properly fit to openings.

7:6 RE-SCREEN WOOD WINDOW SCREENS - See Spec. 6:8, same requirements as re-screen wood screen doors. Must properly fit opening.

7:7 RE-SCREEN ALUMINUM WINDOW SCREENS - See Spec. 6:8, same requirements as re-screen aluminum screen doors. Must properly fit opening.

7:8 GLASS EXTERIOR - All loose materials and broken or cracked glass shall be replaced with minimum of SSB glass. Remove all old putty and compound. Install with glazing points or clips as required. New glazing compounds of respective type for wood or aluminum shall be applied in a uniform and neat manner according to manufacturer's recommendations. Back bed is required and installation shall not leak. All glass over 3 SQ FT in area shall be DSB. Door glass replacement shall have stops reinstalled to a reasonable fit with all nails countersunk. The above item is for use only on exterior openings of interior heated areas. Wooden sashes require linseed oil application before applying compound or putty. Glazing compound shall be equal to DAP #33 (wood or metal) or written approved equal. (Supersedes 7:9)

7:9 REPUTTY, EXTERIOR GLASS - Wood surfaces shall be properly prepared by removal of all loose, cracked, or otherwise unsound material. Clip points or other proper holding devices shall be installed. New glazing compounds shall be of approved grade and applied according to manufacturer's specifications. Caulking compounds, in lieu of glazing compounds, are not permitted. The above item is for use only on exterior openings of interior heated areas. Wooden sashes require linseed oil application before applying compound or putty. Glazing compound shall be equal to DAP #33 (wood or metal) or written approved equal. Metal sashes shall be properly prepared and glazing compound shall be of approved type for metal, equal to DAP #33 (wood or metal) or written approved equal.

7:10 WOOD WINDOW PARTS - Repair if economically feasible. Adequate flashing to exterior wall shall be applied for satisfactory waterproofing. New wooden exterior parts shall be preservative treated.

7:11 WEATHERSTRIP FOR WINDOWS - Flexible aluminum base shall be 3/8" wide with gray vinyl insert, overall width 9/16". If non-existing or if existing is not an effective seal, after adjustment of stoops (if required) and painting, provide new and install to manufacturer's printed instructions, continuous at both jambs, head, sill and meeting rails on all operable sashes.

7:12 BALANCES, WEIGHTS & LOCKS - Broken sash cords and/or missing weights shall be furnished and installed. Defective or missing balances shall be replaced. Upper and lower sashes shall operate free. All windows with window units installed shall have a security locking device.

7:13 NOISE ABATEMENT - Single Pane windows shall be replaced if the property is located within 1,000' of a major road or 3,000' of a railroad and, the noise levels exceed the decibel limits as established by HUD. This requirement does not apply to the Emergency Repair Program.

8. MASONRY

8:1 MASONRY UNIT REPAIR - Existing exterior masonry shall be repaired in a workmanlike manner. Where masonry is installed for repair, there shall be an existing continuous reinforced concrete grade beam with the proper footing. All joints shall be properly tooled and left in a clean condition. Building face brick shall be of gas-fired solid clay or shale units. Clean all masonry of mortar and stains with an approved masonry cleaner.

8:2 MASONRY PAINT - Should existing exterior porous masonry, including concrete, stucco, or plaster, require painting to prevent entrance of moisture and/or to cover discoloration, apply one coat of paint that is approved for use on exterior surfaces as these, to manufacturer's specifications.

8:3 REPAINT MASONRY JOINTS - Existing exterior deteriorated or open masonry joints shall be repainted with a rich grout of cement sand, etc., to approximately match existing color and joint type. Properly tool joints and clean excess grout or mortar from masonry surface. Re-plaster if required. (See Plastering Spec. 1:5)

8:4 MASONRY CHIMNEYS - Existing shall be structurally safe, durable, and smoke tight; repaint, repair and brace. Hazardous conditions either to structure or life shall require demolition.

9. FLOOR & FINISH

9:0 GENERAL REQUIREMENTS - All new floor finishes and/or coverings shall be of a reasonably cleanable type for sanitary maintenance; shall adequately protect surfaces and upon completion shall be free of stains and other foreign matter other than preexisting.

9:1 WOOD FINISHED INTERIOR - Existing damaged areas shall be removed and new flooring of the same type and material applied. All surfaces shall be properly sanded, filled, sealed, and varnished with two coats of gloss varnish.

9:2 SHEET VINYL COVERING - Sheet vinyl/tile installation – All floors that are to receive sheet vinyl or tile floor coverings shall be properly prepared either by sanding and removing all foreign material from surfaces, properly filling, and cleaning; or by installing

an underlayment in a neat and workmanlike manner according to manufacturer's recommendations. Floor covering shall be of high quality (a minimum of .080 inch thick or a wear layer of 6mil or greater) and be installed in a workmanlike manner and with mastic materials recommended by manufacturer. **Self-adhesive tile is not permitted.**

9:3 CERAMIC TILE FLOORS - Repair if feasible. If new, install 12"x12" ceramic floor tile, minimum PEI rating of 3, over ¼" cement backer board. Use of backer board is not necessary when installing over concrete foundations. Tile shall be installed in a workmanlike manner according to manufacturer's recommendations. Grout and seal joints.

9:4 WOOD EXTERIOR, FLOORS AND CEILINGS - Existing damaged areas shall be removed and new flooring or ceiling of the same type shall be applied. Finish shall be a prime coat and two coats of latex enamel paint as recommended by the manufacturer for use on exterior wood. (See Specs. 3:2 Porches & 9:1 for surface preparation)

9:5 COVERED WOOD INTERIOR - All damaged portions shall be removed and new covering of same type and material applied. No finish required, covering to be as specified.

9:6 CARPET - Deteriorated carpeting shall be removed; install new durable nylon continuous filament carpet, minimum 25 oz. face weight, with 6 lb. 7/16" re-bond padding and tack strip according to manufacturer's recommendations.

10. WALLS AND/OR CEILINGS (INTERIOR)

10:1 DRYWALL AND CEILING - For replacement of entire area, the sheetrock shall be a minimum thickness of 3/8" where framing is no greater than 16" o.c. Where framing is 24" o.c., dry wall products shall be no less than ½" in thickness. Moisture resistant "green board" will be used in wet locations. All dry wall products shall be taped, bedded, floated, and textured to match existing in a workmanlike manner, and dried properly (minimum of 24 hours drying period shall be required).

10:2 WAINSCOT - Where masonite or tempered tile is required, it shall be installed with metal, plastic, or wood trim and sealed properly to prevent entrance of moisture. All trim and wainscot shall be installed to a minimum of 4' high (off floor) and shall have a durable, washable finish. Walls for showers or tub/showers shall be of same material and a minimum of 6' high from floor or bottom of tub.

10:3 SHEETROCK REPAIR, WALL/CEILING - Shall be same thickness as existing, adjoining material. (See specification 10:1 for joint treatment and finished texture)

10:4 WALLPAPER, WALLS - Existing deteriorated canvas shall be replaced; existing loose canvas shall be refastened to wall. If installing new, complete tear off of old paper is required. Wood or other wall and ceiling trim shall be removed and then properly installed over new paper. Finished walls shall have square cut corners, neat vertical tight seams to match pattern, and shall meet at casing of all openings. Wrinkles, tears, loose or soiled new paper, will not be acceptable.

10:5 WALL PAPER, CEILINGS - (See Spec. 10:4 for application). Existing canvas and paper, if tight to ceiling, will be acceptable to canvas and paper over.

10:6 WOOD PANELING, WALL - Should wood paneling and trim be required to replace damaged existing, the paneling should approximately match the existing as to style, grain, color and trim. Fasten in a uniform flat plane as recommended by the manufacturer and with tight uniform joints. Minimum 1/8" or match existing thickness. Casing trim for openings shall match paneling as to grain, texture and finish.

11. MILL WORK

11:0 GENERAL REQUIREMENTS - Repaired or new, material shall be of a select grade of white pine or equivalent. Finger jointed material not allowed on surfaces to be stained and varnished. Plywood shall be of A grade. All measurements and dimensions shall be verified at the job and the Contractor shall be responsible for any work that does not fit properly. Rough carpentry shall be self fitted, nailed, and drawn up tight. Finish work shall be free from machine or tool marks, abrasions, raised grained, etc., on exposed surfaces, and shall be machine sanded and hand dressed to a smooth finish. Joints shall be tight and so formed as to conceal shrinkage.

11:1 CABINETS - Cabinets and hardware shall be repaired if feasible; new hardware can be wood or metal knob or pull with approved type latches to hold doors in closed position and shall match existing as nearly as possible. If new, cabinets shall be quality mill-made modular units with solid hardwood face frames, hardwood door frames and drawer fronts, with self-closing hinges, nylon and metal drawer guides, set level and joined with concealed nails and screws where practical.

11:2 COUNTERTOP - If new shall be one piece plastic laminate over 3/4" composition base with minimum 4" backsplash. Edges may be rolled or flat type. End splash is required where countertop butts against a wall or cabinet. Caulk around top of countertop with mildew resistant silicone sealant.

11:3 INTERIOR TRIM - Repair to match existing as closely as possible. If new, shall be of white pine. All molded members and trim shall be mitered or coped at corners. Nails in exposed work shall be set and filled. Trim around doors and openings shall be full length and jointed only at corners. Scribing, mitering, and joining shall be done accurately and

neatly. Window stools must have mitered bull nosed front end with aprons of base molding back cut at 22-1/2 degrees. Shoe molding is required in every room where sheet vinyl or ceramic tile flooring is installed.

12. PAINTING

12:0 GENERAL REQUIREMENTS - The Contractor shall inspect the building and note the conditions of all existing conditions and the preparatory work required prior to painting operations. The Contractor shall not be compensated for claims of extra labor involved in preparation of surfaces to receive paint and other finishes nor shall his guarantee in any way be validated because of his failure to inspect the existing surfaces and ascertain the prior conditions affecting his work. Application of paint on any surface shall constitute acceptance of the surface for paint by the contractor. **Minimum grade paint shall be Glidden Evermore or written approved equivalent.** Home owner may choose paint sheen i.e. flat, eggshell, semi-gloss.

MATERIALS – All paint materials shall be delivered in original, unopened containers, with labels and tags intact. All materials shall be of the highest quality and be used for the purpose for which they were manufactured. **Use of lead-based paint shall be prohibited.** Kitchen cabinets shall be re-stained and sealed with varnish or polyurethane unless Homeowner requests paint. If paint is requested, type shall be clearly specified in contract, and Homeowner shall be given choice of color.

PREPARATION OF SURFACES - Nail holes, splits or scratches shall be puttied or spackled smooth after prime coat. Drop cloths shall be provided and precaution taken to prevent paint materials from falling on or marring any adjacent surfaces not to be painted. All surfaces requiring finishing shall be cleaned and dry prior to painting. Window and door glass, floors, and other work items shall be cleaned of all stains and foreign matter, other than preexisting, to include putty, paint, caulking, etc. prior to acceptance. Exterior metal columns, railings, etc. shall be brushed or scraped to remove all loose peeling paint.

APPLICATION- Apply according to manufacturer's specifications. Maintain temperature of rooms where varnish or enamel is being applied at 70 degrees F or more, and at 50 degrees F or more during other interior painting. Exterior painting shall be performed when the air temperature is 50 degrees F or higher and on dry surfaces with dry weather conditions. Field painting will not be required on items specified to be completely pre-finished at factory or on aluminum, copper, brass, and bronze, or on glazing compound in aluminum windows. Back prime new wood and/or trim with one coat exterior latex wood primer. Allow paint to dry between coats. Protect all work from damage by the use of drop cloths, etc. Remove paint stains completely from finished work. When color stains, dirt or undercoats show through the final coat of paint, the work shall be covered by additional coats until the paint is of uniform color and

appearance and coverage is complete. Where two coats or more of paint are specified, the coat applied prior to the finish shall be applied noticeably lighter in shade than the finish coat. Existing hardware and accessories, fixtures, and similar items shall be removed or protected during painting and thoroughly cleaned and replaced upon completion of painting. Sand interior enamel surfaces lightly between coats. Uses of no-sand solvents are permissible if used in accordance with manufacturer's recommendations. All painting shall be done by skilled craftsmen and shall be complete, giving full coverage, leaving no streaks, shadows, or other blemishes and free from runs, sags, skips, and unsightly brush marks. Make edges of paint adjoining other material or colors sharp and clean without overlapping. Should workmanship of finish be found defective, proper preparatory work shall be done and additional coats shall be applied as necessary to produce a finish in accordance with these specifications. Upon completion, touch-up and restore finish where damaged or defaced.

OBJECTIVE- The use of exterior and interior finishes on the dwelling that will assure against the entrance or penetration of moisture and extremes of temperature; protect from damage by decay, corrosion, insects and other destructive elements; provide reasonable durability and economy of maintenance. Standards for new work shall be used as a guide for making repairs to existing materials in type and color.

MATERIALS- Paint shall be well ground, shall not excessively settle, cake, or thicken in the container, shall be easily mixed to a smooth consistency and have brushing properties. Paint shall be ready mixed, except that tinting may be done on the job. All paint materials shall be delivered in original unopened containers, with label and tags intact. All materials shall used for the purpose for which they were manufactured. Additions of thinning material are not permitted unless recommended by the manufacturer. **NOTE: LEAD-BASED PAINTS ARE NOT PERMITTED OR ACCEPTABLE.**

ALTERNATE EXTERIOR APPLICATION- Exterior paint may be applied by airless spay painting equipment. This alternate application requires a minimum of two coats of paint. Additional coats may be required for sufficient coverage. Approved paint shall be ready mixed and used as supplied by manufacturer without thinning.

12:1 EXTERIOR TWO COAT LATEX - Exterior walls, trim and other exposed wood shall have two (2) coats of mildew, fade resistant exterior grade, latex paint, (Glidden Evermore or written approved equivalent), applied in accordance with manufacturer's instructions.

12:2 EXTERIOR ONE COAT LATEX - Should structure have been recently painted one coat and existing finish does not require removal or scraping and is in acceptable condition, apply one coat of mildew, fade resistant exterior grade latex paint, (Glidden Evermore or written approved equivalent) in accordance with manufacturer's instructions.

12:3 EXTERIOR MASONRY PAINT - See Masonry Spec. 8:2.

12:4 INTERIOR DRYWALL, CEILINGS AND WALLS - New drywall textured products shall be painted with two coats of latex enamel paint (color selected by owner), minimum 12 year warranty, applied to manufacturer's recommendation. If painting over existing, one coat is sufficient if results provide adequate coverage. Apply by roller or brush.

12:5 INTERIOR WOOD - New wood doors, wood trim, and other finish woodwork shall be painted with two coats of latex enamel paint (color selected by owner), minimum 12 year warranty, applied to manufacturer's recommendations. If painting over existing, one coat is sufficient for either paint or varnish, if results provide adequate coverage. (Supersedes Spec. 12:6)

12:6 CAULKING EXTERIOR - Completely close and seal all openings, penetrations, cracks or joints including, but not limited to, perimeter of frames around doors, windows, and where other type wall materials join dissimilar materials. Existing loose or brittle caulking or caulking not effectively sealing, shall be removed and replaced with new material.

- A. Include all material, labor and equipment required to complete caulking as hereinafter specified.
- B. (1) Caulking compound shall be acrylic latex painter's caulk, minimum 25 year durability guarantee, suitable for exterior application.
(2) Joint Filler: Closed cell sponge rubber, polyethylene, vinyl tubing or closed cell urethane foam rope.
- C. (1) All joints shall be thoroughly cleaned out, all dust and loose material removed and surface completely cured and dry before application of caulking compound. Caulking shall be applied around all windows, door frames, louvers, where piping penetrates exterior wall and elsewhere as required. Install in strict accordance with manufacturer's directions. Apply by method best suited to the job conditions. Depth of joint shall be equal to slightly greater than width. Do not install caulking compound in joints wider than $\frac{3}{4}$ " thick by $\frac{1}{2}$ " deep. Where necessary, pack joints with filler. Diameter of back-up material shall be approximately 30 percent greater than normal width of joint. Completely fill joints with compound. Smooth with a finishing tool dipped in an approved solvent. Finish flush with adjacent surfaces.
- D. All excess caulking compound shall be removed immediately with a solvent, light wire brushing, or sanding. All adjacent surfaces shall be left clean and free from stains.

12:7 CAULKING INTERIOR - Completely close and seal all openings, penetrations, cracks or joints including, but not limited to, casings around doors and windows, wood trim and moldings, and where vinyl flooring meets base or shoe molding. Existing loose or brittle caulking or caulking not effectively sealing, shall be removed and replaced with new material. Compound shall be acrylic latex painter's caulk, minimum 25 year durability guarantee. Excess compound shall be removed with manufacturer's recommended solvent or by brushing or sanding. Adjacent surfaces must be clean and free from stains.

12:8 EXTERIOR TWO COAT ON IRON OR STEEL - Exterior iron columns, steel railings, etc., shall have one coat of metal primer and two coats of rust preventive oil base enamel.

13. NEW CONSTRUCTION, ADDITIONS, ENLARGEMENTS - Considered on a case-by-case basis i.e. family size, condition of existing structure, and or the availability of funding.

14. BUILT-INS

14:1 COUNTERTOPS AND COVERING - Existing tops must be repaired or replaced before covering is applied. Repair base to sound condition with clean surface, should new base be required, material shall be $\frac{3}{4}$ " plywood or written approved equal. New covering material shall be securely bonded to base. Top covering material shall be waterproof and washable sheet plastic laminate, vinyl plastic, linoleum, or other equivalent material suitable for its intended use as called for in the work write-up. At least a 4" high backsplash shall be provided where abutting walls. Trim or edging shall be metal, or edges shall be of same covering material as cabinet top. All corner and edge trim, if metal, shall be rust resistant. All joints and under trim shall be properly sealed with an approved waterproof sealant to prevent entrance of moisture.

14:2 TUB ENCLOSURE - Shall completely enclose all area below finish lip of tub. Materials shall be non-absorbent of same type as existing, provided it is a durable surface as called for (See Spec. 10:2)

14.3 BUILT-IN OVEN AND/OR COOKING UNITS - Manufacturer's recommended installation instructions and templates shall be followed and used. (See Millwork Spec. 11:1 for materials and construction requirements.)

14:4 CLOSETS, CLOTHES - Existing closets shall be provided with upper shelves approximately 12" wide with securely mounted hanging rods.

14.5 LAUNDRY FACILITIES SPACE - Provide adequate and/or repair existing in kitchen or other suitable space.

14.6 STORAGE FACILITIES SPACE, INTERIOR - Repair existing. Provide shelving if necessary.

15. ATTIC AREA

15:1 VENTS - Existing attic vents and louvers shall be repaired if economically feasible. New shall be of either minimum 26 gauge galvanized metal or wood. They shall be of adequate size to ensure proper cross ventilation of the attic space and be provided with a minimum of ¼" x ¼" mesh bird screen for protection. Install watertight to structure. (See Paint Finish 12:8)

15:2 ACCESS DOOR OR STAIRS - Repair existing if feasible. If new, access opening to be of adequate size, minimum 22" x 36", to accommodate entrance to all of the attic area and of sufficient size to service or remove existing mechanical equipment from this area. If installing attic stairs, unit shall be tri-fold, with full width main hinge, 1" x 4" treads, and sanded plywood door. All openings to be trimmed with 2-¼" base molding, primed and painted with Latex Enamel.

15.3 INSULATION, ATTIC SPACE, BATT OR ROLL TYPE - Provided insulation does not exist and roof pitch is not less than 3 in 12 with a minimum of 48" clear headroom at roof ridge, insulation is to be installed over habitable heated areas. Insulation is to be batt or roll type blanket 15" or 23" wide for 16" or 24" o.c. joist spacing respectively with factory applied vapor barrier on down side (heated side) of mineral glass fiber batt. Thickness to be minimum 6". Material shall be UL labeled, listed or rated noncombustible. The "R" thermal resistance value to heat flow on the above is R-19.

15:4 INSULATION, ATTIC SPACE, LOOSE FILL, MACHINE BLOWN - Shall be approved and in general conformance with the requirements of Federal Specification HH-I-515 C and ASTM C739 and bear Underwriter's Laboratories Inc. Fire Hazard Classification and label service, noncombustible, UL machine blown only over habitable heated areas. Installed density to be minimum R-38.

CAUTION: To prevent condensation, a positive movement of air out of the attic area is essential. For batt or roll type insulation with vapor barrier, one square foot (1 SQ FT) of free vent area shall be provided for each 300 SQ FT of attic floor area. For loose machine blown insulation, provided one square foot (1 SQ FT) of free vent area for each 150 SQ FT of attic floor area.

16. MECHANICAL

16:1 VENTILATORS - All mechanical ventilators shall be vented through the roof and shall be covered with a rain proof hood or cap of galvanized metal. For use in bathrooms without other means of ventilation. Minimum 70 CFM, wired to operate from a wall switch.

16.2 VENT HOOD KITCHEN – To be installed in accordance with manufacturer’s instructions. Type (vented or re-circulating) and size to be specified in bid document. Must provide a minimum of 160 CFM fan speed.

16:3 CENTRAL HEATING/AIR, EXISTING OR NEW - Repair existing if feasible. If not existing and only source of heat is space heaters or wall/floor furnaces, and only source of air conditioning is window units, install a central heating/air system sized according to Manual “J” load calculation. Furnace must be capable of heating all habitable rooms and baths to at least 70 degrees F at a distance 3’ above the floor. Provide 12 SEER or better condenser with matching evaporator coil, copper line sets, insulated ductwork and plenum, directional registers, return air, thermostat, power supply and breaker, furnace supply line, flue vent through roof with flashing, condenser slab and electric disconnect at condenser. Wall furnaces and gas space heaters will be removed unless otherwise noted in the work write-up. All mechanical work shall be performed by a licensed HVAC contractor and inspected and approved by the Office of Community and Economic Development Building Inspection Department.

17. PLUMBING

17:0 GENERAL REQUIREMENTS - All plumbing components, installation, and modifications which are required by the work write up or by the plumbing code shall meet all the requirements of the local codes and ordinances. All plumbing shall be safe and in good working condition with adequate supply of both cold and hot water.

17:1 BATHROOM ACCESSORIES - Each complete bathroom shall be provided with soap dish at bathtub, toilet paper holder at water closet, soap dish at lavatory (may be integral with lavatory), towel bar, mirror, shower curtain rod, and medicine cabinet or equivalent enclosed shelf space. Medicine cabinet may be of wood or metal, and recessed, 16” wide with 2 adjustable shelves and magnetic catch. Accessories shall be of heavy, durable, formed or cast metal, with chrome or anodized aluminum, rust and corrosion resistant finish. Grab bars designed for intended use shall be furnished for the handicapped.

17:2 STACKS (VENTS), WATER LINES - Existing stacks exposed at the exterior walls shall remain and be satisfactorily repaired. Stacks or plumbing vents for new construction shall be concealed within the walls using schedule 40 polyvinyl chloride pipe and fittings. All stacks and vents with acceptable flashing shall extend through and above the roof. New water supply lines must be type “L” copper, located inside wall cavities and

pressure tested to 125 psi for 30 minutes. A dielectric fitting is required between piping of dissimilar metals. All water lines above grade and not inside an insulated cavity or ceiling/attic space will be freeze protected with ½” fiberglass insulation, sealed at joints. All installations shall meet the Plumbing Code.

17:3 SEPTIC TANK - Provided municipal sanitary sewer is available, septic tank must be removed. Removal shall be done in such a manner as to cause a minimum amount of damage to the surrounding structures and landscaping. A permitted liquid waste hauler approved by the Office of Community and Economic Development must pump the septic tank and remove all liquid waste water. The liquid waste hauler must provide a trip ticket, a copy of which must be provided to the Office of Community and Economic Development. After the tank has been emptied it should be crushed and filled to the ground level with fill materials less than 3” in diameter. The fill must be free of organic material and construction debris and be of such consistency and compaction to prevent subsequent settling. Provide necessary sanitary sewer and connections, with clean-out, for new yard lines.

17:4 WATER HEATER - New water heaters shall be of capacity as called for in the work write-up with a minimum 6 year warranty. Gaswater heaters shall include approved flue, T&P discharge line to outside structure, combustion air from outside (under house or attic), gas stop valve and flex water lines with a cold water ball valve. Install according to manufacturer’s recommendations and Plumbing Codes. *Electric* water heaters shall including electrical connection, T&P discharge line to outside structure, and flex water lines with a cold water ball valve. Water heaters of appropriate additional storage capacity to compensate for low heating capacity are acceptable. Relocation of water heater required by inadequate clearance, location in areas prohibited by the property rehabilitation standards, etc., shall be re-installed in a location approved by the administering agency, in a serviceable condition with required vents and accessories as required by local codes and ordinances. Water heaters in confined areas must have openings for adequate combustion air.

Recovery rates vary with the type of fuel used. Generally, gas-fired water heaters have a higher recovery rate than electric water heaters. Low recovery rates can be compensated for by the provision of a larger storage capacity. As a general guide, the following sizing chart shall be used in determining the storage capacity of a water heater.

Gas Water Heater	
30 gallon	3 to 4 people
40 gallon	4 to 5 people
50 gallon	5 or more people
Electric Water Heater	
30 gallon	2 to 3 people
40 gallon	3 to 4 people

50 gallon	4 to 5 people
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17:5 TPR VALVES - Existing or new water heaters shall be equipped with self-closing temperature and pressure relief valve properly sized.

17:6 SINK, DOUBLE - Replace kitchen sink with stainless steel double basin sink, minimum 6" deep, 30" self rim unit including strainers and drain plugs, trap, continuous waste and escutcheons. Rim to be sealed to countertop with standard sealer.

17:7 SINK, SINGLE - For bathrooms, install 24W" x 18"D cultured marble vanity top with integral backsplash and sink. .

17:8 "P" TRAP - Shall be provided to meet the Plumbing Code.

17:9 FAUCETS - Shall be new. Brand and type as specified in bid document. Faucets must be chrome plated brass and washerless. All fixtures shall be water saving and of the anti-scald type.

17:10 GAS METER, RELOCATE - Existing must be removed from under or within a structure. Locate equipment as required by local codes and ordinances.

17:11 TOILET - If existing is unusable, unsanitary, or not repairable, replace with new water saving, 2-piece, vitreous china, round rim toilet, complete with 1.6 gallon tank and lid, bowl, toilet seat, wax ring with sleeve, two flange bolts with caps, connected to a valved supply line. Existing fixture, if repaired, shall operate satisfactorily.

17:12 LAVATORY - Unless otherwise called for in the work write-up, replace lavatory base cabinet with a 24"Wx18"Dx31-1/2"H modular unit with veneer interior, solid wood face and door frames, single or double door. Lavatory top shall be 24W"x18"D cultured marble with integral backsplash and sink.

17:13 TUB AND/OR SHOWER - If existing is unusable, unsanitary, or not repairable, replace bathtub with an enameled steel tub , complete with lever operated pop up drain and trap overflow, water and waste connections, tub filler, shower flange, shower head and shower curtain rod. If shower only, replacement shower base to be 36" acrylic with fiberglass reinforcement, terraced side walls, front water dam, molded-in slip resistant floor pattern, center draining. Tub/shower wall surrounds shall be 4-1/4"x 4-1/4" glazed ceramic wall tile over 1/2" green rock or cement backer board; minimum 60" high on 3 sides, according to work write-up.

17:14 SANITARY SEWER LINE, NEW - Shall be installed with proper fall and with free flowing operation and with connection to municipal system. Repair existing sewer lines if not in reasonable operating condition and free flowing. Sewer drains and clean-outs from fixtures must be without leaks and in good repair.

17:15 WASHER/DRYER CONNECTIONS - New or replaced washer connections must be recessed mounted box in the wall with proper drain and vent piping, hot and cold water supply including valves. Dryer venting must be ducted through the exterior wall or to the exterior via a crawl space. All openings must be rodent and weatherproof.

17:16 LANDSCAPING/GRASS RELAY - All trench or ditch work will be properly leveled and graded. Replacement of any damaged landscaping or sod will be included in the cost for that project.

18. ELECTRICAL

18:0 GENERAL REQUIREMENTS - All fixtures, receptacles, equipment and wiring shall be maintained in a state of good repair, safe, capable of being used, and installed and connected to the source of electric power in accordance with the adopted electrical code of the local Building Inspection Department. All existing and/or newly installed wiring both interior and exterior including switch legs shall be concealed within the wall. If this is not possible all interior wiring shall be placed in decorative metal raceways. One half inch or larger thin wall conduit is acceptable for wire encasement on exterior areas only.

- a) Rehabilitation of residential electrical systems must meet guideline requirements of the local Building Inspection Department.
- b) The minimum capacity of the service supply and the main disconnect switch shall be sufficient to adequately carry the total load required in accordance with the electrical code of the local Building Inspection Department. The minimum panel replacement size shall be 150 Amp
- c) Every habitable room shall contain, at a minimum, 2 separate and remote wall type electric convenience outlets. Habitable rooms over 120 SQ FT shall contain, at a minimum, 3 separate and remote wall type electrical convenience outlets. Temporary wiring, extension or zip cords shall not be used as permanent wiring.
- d) Every habitable room shall have at least one (1) ceiling or wall type electric light fixture, controlled by a wall switch, or a wall type grounded electric convenience outlet controlled by a remote switch.
- e) Every toilet room, bathroom, laundry, furnace room, and hallway shall contain at least one (1) supplied ceiling or wall type electric light fixture, controlled by a wall switch, and at least 1 wall type grounded electrical convenience outlet. Wall type convenience outlets used in bathrooms, kitchens, within 6' of a water source, or on the exterior of the structure, shall be of the GFCI type.

f) All heavy duty appliances, i.e., window air conditioners, freezers, electric stoves, washers, electric dryers, microwaves, etc., shall be supplied with its own proper outlets on separate circuits, as applicable.

g) All lighting fixtures installed on the exterior shall be UL approved suitable for exterior use.

h) All broken or missing switch plates or receptacle plates shall be replaced.

i) Supply light bulbs of the appropriate type for all fixtures.

18:1 SMOKE DETECTOR - All homes will have a hard wired smoke detector with battery back-up located adjacent to all sleeping areas. Install a UL approved, 120 volt AC, dual chamber ionization smoke detector with 9-volt DC battery back-up (including battery) complete with rough wiring and outlet box if necessary. (See General Requirements 0:1(i))

18:2 CEILING FANS - Repair existing if feasible. If new, install a minimum 42", 5-blade, 3-speed reversible ceiling fan with light kit and bulbs unless otherwise stated in the work write-up.

18:3 OTHER FIXTURES - If indicated in the work write-up, install new or change out existing fixtures accordingly:

a) Kitchen light- 48" surface mount (2) bulb fluorescent fixture with wrap around acrylic diffuser.

b) Bathroom vanity- 3 light bar fixture with globe bulbs.

c) Front/back porch- one bulb wall mount lantern style fixture.

19. DEMOLITION

19:0 GENERAL REQUIREMENTS FOR REMOVAL - Demolition of structures including accessory buildings, sheds, barns, garages, fences, etc. requires complete removal from the premises. Foundations of wood, masonry, concrete, etc. shall be removed to a minimum depth of 12" below existing grade. Floors of concrete or masonry shall be completely removed unless specifically outlined in the write-up as being used for patio, recreation area, etc. Burying of demolition debris on the site is not permitted.

19:1 SITE WORK, CLEAN UP - Site must be uniformly and adequately graded to prevent ponding of water. All materials, salvageable or otherwise, including rubbish, must be removed from the premises.

Demolition area must be raked clean.

20. ARCHITECTURAL BARRIER REMOVAL

20:1 RAMP INSTALLATION

Work shall comply with all applicable local codes and the provisions of the *Americans with Disabilities Act (ADA)*.

The following specifications are intended to serve as general guidance. In all cases, local codes and the requirements of the ADA shall control design and construction. Material specifications may be exceeded in quality, strength and durability at the discretion of the contractor and written approval of the homeowner and the Rehab Office. These specifications, provisions of OCED code and ADA requirements are the minimum that will be allowed. It is the responsibility of the contractor to (1) acquire permits, (2) supply drawings and plans, and (3) pass all inspections required by the local governmental entity.

20:2 SLOPE AND RISE

The least possible slope shall be used for any ramp. The maximum slope of a ramp shall be 1:12. The maximum rise shall be 30 in.

20:3 CLEAR WIDTH

The minimum clear width of a ramp shall be 36 in.

20:4 LANDINGS

Ramps shall have level landings at **bottom and top** of each ramp and each ramp run. Landings shall have the following features:

- (1) The landing shall be at least as wide as the ramp run leading to it.
- (2) The landing length shall be a minimum of 60 in. clear.
- (3) If ramps change direction at landings, the minimum landing size shall be 60 in. by 60 in.
- (4) If a doorway is located at a landing, then the area in front of the doorway shall comply with the following:
 - (a) Outward swinging door
Width = 5'; Depth = 5'
 - (b) Inward swinging door
Width = 5' Depth = 3'
- (5) The ramp landing shall begin at a point level with the house entry door.

- (6) The ramp shall end at a smooth, seamless transition with adjacent surfaces. This shall be accomplished by cutting into existing surfaces, forming, reinforcing and pouring concrete to edge of ramp end point.

The ramp end landing must provide for easy transfer of user from landing to a transportation vehicle.

20:5 HANDRAILS

If a ramp run has a rise greater than 6 in. or a horizontal projection greater than 72 in., then it shall have handrails on both sides. Handrails shall have the following features:

- (1) Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback or dogleg ramps shall always be continuous.
- (2) If handrails are not continuous, they shall extend at least 12 in. beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface.
- (3) The clear space between the handrail and the wall shall be 1-1/2 in.
- (4) Gripping surfaces shall be continuous.
- (5) Top of handrail gripping surfaces shall be mounted between 34 in. and 38 in. above ramp surfaces.
- (6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.
- (7) Handrails shall not rotate with their fittings.
- (8) Gripping surfaces shall be uninterrupted by newel posts, other construction elements, or obstructions.
- (9) The diameter of the gripping surfaces of a handrail or grab bar shall be 1-1/4" to 1-1/2" or the shape shall provide an equivalent gripping surface.

20:6 REMOVAL OF OBSTRUCTIONS

All barriers to proper ramp construction shall be removed and replaced (if necessary) including but not limited to:

- (1) Existing handrails and support posts
- (2) Existing driveway and sidewalk surfaces
- (3) Landscaping, trees, shrubs etc.
- (4) Existing ramps.

20:7 CROSS SLOPE AND SURFACES

The cross slope of ramp surfaces shall be no greater than 1:50. Ramp surfaces shall be slip resistant

20:7 MATERIALS As specified in the Bid Document

21. CONSERVATION

21: 1 General Requirement

All conservation efforts must meet standards as set forth by the EPA and U.S. Department of energy's Energy Star Program.

21: 2 Energy Audit Report

All improvements listed in the work order specifications must meet the proposed methods, materials, and measures identified in the Energy Audit Report. The work order specifications will on a case-by-case basis super cede the recommendations from the Energy Audit report.

NOTE:

The OCED reserves the right to amend the Contractor's Manual, at any time, as to preserve and protect the rights of the Office of Community and Economic Development and/or the citizens of Washtenaw County engaged in the Housing Programs administered by the Office of Community and Economic Development.

APPENDIX C

CONTRACTOR INSURANCE PROVISIONS

The CONTRACTOR will maintain at its own expense during the term of this Contract, the following insurance:

1. Workers' Compensation Insurance with Michigan statutory limits and Employers Liability Insurance with a minimum limit of \$100,000 each accident for any employee.
2. Commercial General Liability Insurance with a combined single limit of \$1,000,000 each occurrence for bodily injury and property damage. The

County shall be added as "additional insured" on general liability policy with respect to the services provided under this contract.

3. Automobile Liability Insurance covering all owned, hired and non-owned vehicles with Personal Protection Insurance and Property Protection Insurance to comply with the provisions of the Michigan No Fault Insurance Law, including residual liability insurance with a minimum combined single limit of \$1,000,000 each accident for bodily injury and property damage.

Insurance companies, named insured and policy forms may be subject to the approval of the Washtenaw County Administrator, if requested by the County Administrator. Such approval shall not be unreasonably withheld. Insurance policies shall not contain endorsements or policy conditions which reduce coverage provided to Washtenaw County. Contractor shall be responsible to Washtenaw County or insurance companies insuring Washtenaw County for all costs resulting from both financially unsound insurance companies selected by Contractor and their inadequate insurance coverage. Contractor shall furnish the Washtenaw County Administrator with satisfactory certificates of insurance or a certified copy of the policy, if requested by the County Administrator.

No payments will be made to the Contractor until the current certificates of insurance have been received and approved by the Administrator. If the insurance as evidenced by the certificates furnished by the Contractor expires or is canceled during the term of the contract, services and related payments will be suspended. Contractor shall furnish the County Administrator's Office with certification of insurance evidencing such coverage and endorsements at least ten (10) working days prior to commencement of services under this contract. **Certificates shall be addressed to the Washtenaw County c/o: the Office of Community and Economic Development & CR# _____, P. O. Box 8645, Ann Arbor, MI, 48107, and shall provide for 30 day written notice to the Certificate holder of cancellation of coverage.**

APPENDIX D

ACKNOWLEDGEMENT OF CONTRACTOR'S MANUAL AND ALL TRADES MASTER SPECIFICATIONS

I, *the Contractor*, have received, read, and understand the *Contractor Manual and All Trades Master Specifications* and shall abide by all of its policies and guidelines for all of the housing programs administered by the Office of Community and Economic Development. I, *the Contractor*, will comply with the following conditions on all projects financed by the Office of Community and Economic Development

1. Fully comply with all General Conditions and Specifications
2. To use forms approved by The Office of Community and Economic Development on all projects.
3. If work performed by the contractor is found to be unsatisfactory by The Office of Community and Economic Development, or if relations between the contractor, homeowner and or other parties are found to be unsatisfactory, The Office of Community and Economic Development may remove the contractor from the "Approved Contractor's List."
4. All work shall be performed in accordance with local Building and Housing Rehabilitation Standards adopted by the Office of Community and Economic Development and subject to progress inspections as deemed necessary by the Housing Rehabilitation Staff.
5. All required insurance and licensing will be maintained.
6. Workman's Compensation will be provided.
7. That the contractor will abide by Equal Opportunity provisions of the Civil Rights Act.

Company Name and Address

Contractor Signature

Date

***Please sign return this form to the Office of Community and Economic Development.**

****All current Contractors on the Approved Contractors list must sign and return this form to the Office of Community and Economic Development in order to remain active on the Contractors list.**