



August 25, 2017

RE: Triangle 2017 3bdr ranch - Request for Proposals (RFP)

Attention bidders:

The Northeast Neighborhood Redevelopment Organization is pleased to release the following single family home for bid. This project will construct 1 new single family home. Construction schedule has not been determined.

Read the all the RFP documents carefully and do not hesitate to ask any questions you may have.

Bid proposals on this package are due to NNRO by 3:00PM Friday September 15, 2017. Please carefully review RFP package for further information. Good luck.

Cordially,

Patrick Lynch
patlynch@sbheritage.org
574.286.0816

RFP Document List

All documents listed below are available in .pdf format on the South Bend Heritage website. Please go to <http://sbheritage.org/projects-blog/contractors/>

- NNRO RFP Invitation to bid 08-25-2017
- NNRO Project Manual 08-25-2017
 - RFP Invitation to bid
 - Specifications
 - **A** through **N** bid package descriptions
 - Bid form (copy as needed for each bid package)
 - Insurance minimums
 - Contractor references form
- NNRO Drawing Set dated 08-25-2017

- A305 Sub-contractor qualification form

Specifications for: Triangle Ranch House 2017
Issued with RFP: August 25, 2017
Revised:

DIVISION 0 – Bidding and Contract Requirements

1. This specification, dated August 25, 2017 or as later revised, supersedes and replaces all prior specifications for this project.
2. Bids will be due on **Friday September 15, 2017** at the SBH offices by 3:00PM. (Received via mail, faxed, emailed, or dropped off by this time.) SBH offices are located at 803 Lincoln Way West, South Bend, IN 46616. Bids are to the attention of Pat Lynch at 574.286.0816.
3. Bids not utilizing the attached Bid Form will not be accepted. Additional materials may be submitted. Voluntary alternates submitted in addition to the primary bid documents will be considered. One bid form per bid package.
4. It is further required that each Bidder submit a detailed Contractor's Qualification Statement on AIA A305. This statement shall include detailed attachments as described with specific reference names and phone numbers of the Owner and Architect of each past project for the purpose of checking references. It is the responsibility of each Bidder to provide sufficient information to determine their ability to perform work of the scale, complexity, schedule, and quality as required by the Contract Documents. In addition, the financial strength of each Bidder will be carefully examined to determine if the Bidder is capable of constructing this project per the specified requirements. If you have submitted an AIA A305 to the NNRO in the last 18 months you may be exempt from this requirement. Please contact Pat Lynch if you have any questions about this requirement.
5. Bidder Registration
All bidders must notify NNRO of their intention to bid by 5:00P Monday, September 4, 2017. Project notices and addenda notices will be emailed to registered bidders only. If you received an RFP announcement directly from NNRO you are not required to register.
6. Full and complete contractor markup on any positive value change orders to be disclosed on the Bid Form.
7. Bid the work according to the RFP documents. If you or your subs have questions about elements of the work please contact NNRO. If information is lacking NNRO will issue new guidelines (Addendums) to all Bidders.
8. Voluntary Alternates
Bidders may submit voluntary alternates. Voluntary alternates will only be considered if bidder has first provided a bid for the work as specified. List voluntary alternates on a separate form or additional copy of the bid form. Number and clearly describe the scope of each voluntary alternate.
NNRO will also consider a voluntary alternate in which two or more separate bid packages are linked for a combined bid amount different than the sum of the separate bid amounts.

9. Approved Equal (Substitutions)
No substitutions of specified products are permitted without written approval from NNRO.
10. Contract between General Contractor and Subcontractor.
The successful bidders will be expected to execute AIA Document A401–2007, Standard Form of Agreement Between Contractor and Subcontractor or an equivalent agreement provided by NNRO. Review copies of this agreement are available from NNRO.
11. Applications for Payment
Draw requests will be made from the Contractor to the Owner at no less than 30 day intervals utilizing AIA G702 and G703 forms. Payment will be made only for work in place at time of the application for payment. Materials purchased and stored may be billed if covered against loss by a certificate of insurance acceptable to NNRO.
Monthly applications are due to NNROF on the 25th of each month. Payment may be expected from NNRO in not less than 30 days or more than 45 days.
12. Lien Waives
Partial conditional lien waivers are required for each application for payment. NNRO prefers that partial lien waivers are submitted in the amount equal to the accompanying draw and conditional upon payment of the draw amount.
A final lien waiver is required at last application for payment. Sub-Contractor lien waivers are not required. However, the Contractor will promptly provide written documentation of Sub-Contractor payment if requested by NNRO.
13. Notice to Proceed
No billable work or commitments of any sort are to begin on the project until after the Contractor has received a written notice to proceed from the Owner. Notice to proceed will be issued to all contractors at the same time at least 1 week prior to the start of construction.
14. Schedule for Construction
See division 1
15. Retainage
Contract will be executed with 5% retainage on each sub-contractor draw. Retainage will be released upon Substantial Completion of the contract minus an amount ascribed to specific punch list items until those items are completed.
16. Prevailing wage and Certified Payrolls
This project does not fall under prevailing wage guidelines. Certified payrolls are not required.
17. Insurance
Certificates of insurance will be required prior to start of the Work. Refer to attached minimum limits of liability. South Bend Heritage Foundation, Inc. shall be named as additional insured under the Contractors' Comprehensive General Liability Policy.
18. Bonds
Performance and payment bonds are required for total contract values greater than \$100,000.00. Bond values to be 100% of the contract value of the Work. The project will be

awarded to the lowest and most responsive bidder who is able to provide payment and performance bonds.

If the total of your proposals exceeds the bonding minimum, you must attach to you bid form a letter from your insurance or surety agency indicating that: either

- your company satisfies their requirements for 100% performance and payment bonds,
- your company partially satisfies their requirements for 100% P&P bonds, or
- your company doesn't satisfy requirements for 100% performance & payment bonds.

Please note that you should submit your proposal regardless of your ability to bond.

If you submit a voluntary alternate for more than one bid package, please have a conversation with your surety to determine if your bond limit will cover the total contract amounts. Please submit your maximum bonding ability with your voluntary alternate.

19. MBE and WBE

South Bend Heritage is committed to minority and women's business enterprise participation in this project.

As a requirement for bidding on this Project, all bidders shall provide written documentation evidencing the bidder's good faith efforts to further South Bend Heritage Foundation's desire to facilitate local worker and MBE/WBE participation in this project. Such documentation shall include a listing of all MBE/WBE's contacted including: (1) the name and address of the MBE/WBE; (2) the type of contact made (i.e. telephone, written solicitation, etc.); (3) the date of the contact; (4) the nature or type of services or goods requested; and (5) the result of the contact.

Responsive bidders shall include this written evidence of their good faith efforts including copies of outreach and copies of email exchanges inviting and receiving quotes or other responses from MBE/WBE firms or other documentations of efforts to encourage and secure competitive quotes from MBE/WBE and local businesses to be included in the benefits of building this project. Written documentation of letters of introduction, invitations to forging majority/minority strategic alliances for capacity building including but not limited to mentoring, extensions of assistance on payroll, insurance, bonding, line of credit, technical skills or business skills will be accepted as further evidence of good faith effort.

All bidders are actively encouraged to reach out to the MBE/WBE firms in St. Joseph County and make real good faith efforts to forge constructive and lasting business partnerships.

20. Copies of the winning bid forms will be available from the Owner after the contract is awarded and construction has commenced.

DIVISION 1 – GENERAL

1. Summary of the Work

Refer to the individual bid package descriptions in a separate document. These bid packages are not specifications. They merely divide the work into biddable portions and refer to the specifications. The scope of work described in each bid package does not limit the contractors' responsibility to understand the entire project and the required coordination of their work with other trades.

There are 2 houses that will be constructed at the same time. These houses are:

Address	Parcel ID #	House type		
Triangle	t.b.d.	3 bdr ranch		

2. Printed documents

To order prints of the drawings (full or half size) and associated RFP documents contact ARC (previously South Bend Drafting Supply), 1303 Northside Blvd. South Bend, IN. 574-287-2944. Interested bidders are responsible for purchasing and picking up bid packages from ARC. You will have to provide the correct pdf file(s) to them.

3. Coordination & Precedence of the Contract Documents

The documents included in the contract are intended to be complementary and to describe a complete work. In case of a difference between drawings and specifications, the specifications shall govern.

4. Means and Methods

The drawings are meant to indicate the general scope of the bid package as related to the site plan, floor/roof plans, and elevations, and are not intended to be fully detailed construction documents. Contractor is responsible for all construction means and methods. This wood frame residential structure and all parts thereof, shall be designed and constructed in strict compliance with the Indiana Residential Code 2005 (IRC) to safely support all loads without exceeding the allowable stresses for materials of construction in structural members and connections. This includes concrete foundation walls/footings, floor, wall and roof framing, beams, lintels, and wind/lateral loading.

5. South Bend Heritage reserves the right to reject any or all bids, and to waive any irregularities in bidding and to make an award in the best interest of the South Bend Heritage Foundation and the City of South Bend.

6. Minor Changes

The Contractor will advise the Owner of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time.

7. Requests for Information (RFI)

The contractor may submit a request for information to NNRO to seek clarifications or resolution to questions that arise during the course of the Work that are not covered in the Construction documents. The NNRO will respond within 5 days.

8. Architects Supplemental Instructions (ASI)
The Architect or NNRO may issue supplemental instructions which include a detailed description of a clarification or proposed change with supplementary or revised Drawings and specifications. If the ASI results in a change to the Contract Sum and/or Contract Time the Contractor will prepare and submit an estimate within 10 days.
9. Potential Change Orders (PCO) Change Orders (CO)
The Contractor may propose a change by submitting a PCO request for change to the NNRO, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation.
10. Permits
The *Utility verification Form* from the SB BOPW will be coordinated and paid for by NNRO.
The General Building Permit will be paid by NNRO.
The BOPW street cut permit for the water tap; occupancy permit (if required); and SB Water Dept. tap fee will be coordinated and paid for by the Plumbing Subcontractor.
The BOPW sewer tap fee will be paid by the Excavation subcontractor.
The BOPW sewer excavation fee will be paid by the Excavation subcontractor.
Mechanical, electrical, and plumbing permits to be by the appropriate subcontractor.
11. Schedule
Construction schedule has not been determined. Notice to proceed will be issued to all contractors at least 1 week prior to start date. Sub-contractors may not begin work until satisfaction of all pre construction requirements. The Schedule is of the essence for this project. Refer to the schedules for each bid package as outlined in the bid package descriptions. Schedules are provided for bidding and general coordination purposes. Contractors will be notified by NNRO if adjustments to the schedule are made.
12. Adverse Weather
NA
13. Bidder References
Provide up names and contact information for three prior clients in which your company demonstrated an ability to deliver a project under a demanding schedule or otherwise met your client's schedule expectations. One criterion for determining bidder responsiveness will be a demonstrated ability to deliver projects on schedule.
14. Meetings & Coordination
Standard Pre-Construction Meeting: date and agenda to be determined.
The following shall be provided by each sub-contractor in advance of the meeting:
 - Draft schedule of values on AIA G702/G703. (Excel document from NNRO)
NNRO is responsible for the coordination of schedules, submittals, and the Work to assure efficient and orderly sequence of installation of interdependent construction elements.
15. Energy Code Compliance
This project will meet the energy code using the performance path.

16. Submittals and/or shop drawings

Submittals from Contractors to Architect or Owner and NNRO are required for the following:

- Truss and framing package showing primary structural calculations and loading.
- Panelized wall system if used and other primary structural elements
- Windows – fabricator submittal / shop drawings
- Exterior doors ~~and storm doors~~ – mnfr. submittal
- Interior doors – mnfr. submittal
- Door hardware – mnfr. submittal
- Cabinetry layout – vendor drawing based on field verified dimensions
- All exterior finish materials and colors incl. colored flashing – material sample with color applied
- All interior finish trim materials and colors
- Floor finishes – carpet, pad, vinyl, underlayment
- HVAC heat/cooling load calculations. Manual J.
- All HVAC equipment – mnfr. submittals
- All Plumbing equipment and fixtures – mnfr. submittals. Include left or right hand qty.
- All required close out documents and OEM manuals

Submit (3) copies of paperwork and (1) physical sample (if required above) for approval. NNRO will respond within three days with approval, conditional approval, or rejection for revision and re-submittal. PDF emailed submittals in lieu of paper submittals are acceptable. Email submittals to patlynch@NNROeritage.org.

17. Schedule of Alternates

Not used

18. Allowances

None

19. Construction Facilities

NNRO shall maintain at least one complete full size and bound set of drawings and specifications at the jobsite for all sub-contractors to reference and make as-built notations. Temporary Electric Service installed by EC. AEP account for temp. power is the responsibility of NNRO.

Dumpsters provided and paid by NNRO.

Port-a-Potty shall be provided and maintained on site by NNRO.

20. Onsite Storage

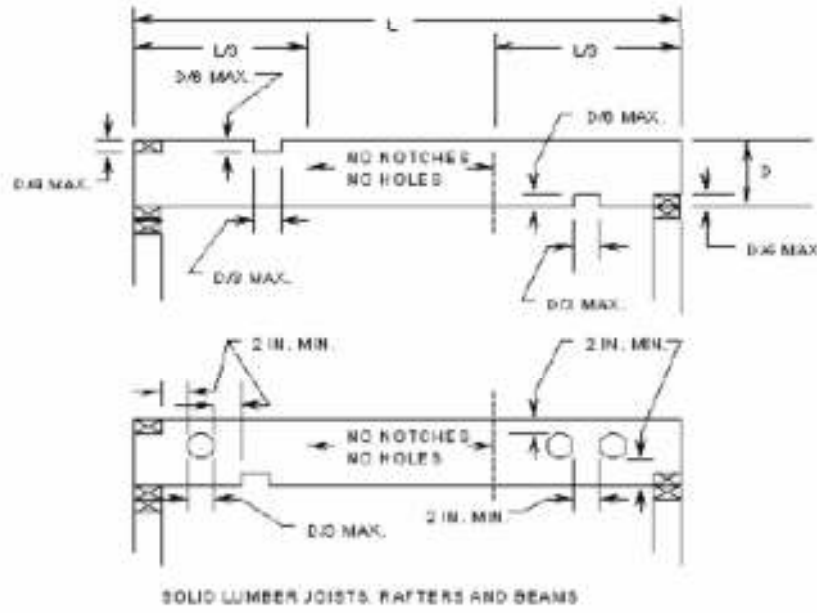
To the greatest extent possible, this project will operate with “just in time” delivery of all materials. Staging of materials onsite outside of the period scheduled for that trade is not permitted unless pre-arranged with NNRO and in contractor provided storage container. Storage of material for current use in structures already completed is not permitted. Staging of materials for more than one group at a time is not permitted unless pre-arranged with NNRO and in contractor provided storage container.

21. Safety

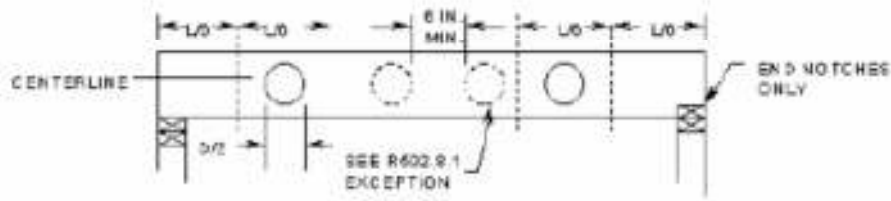
It is NNRO’s responsibility to maintain and enforce an environment of safe work practices at the job site.

22. Cutting, Notching, and Drilling

Structural members to be notched and drilled in conformance with IRC figure R502.8.



SOLID LUMBER JOISTS, RAFTERS AND BEAMS



SOLID LUMBER JOISTS 2 X 6 AND LARGER

23. Job-site debris and cleaning

Premises will be left each day by each subcontractor broom clean. NNRO is responsible to enforce a clean and tidy job site.

24. Temporary Controls

Construction Materials shall be stored off the ground and covered to avoid absorption of moisture and damage.

Mechanical ducts shall be sealed during construction.

25. Construction Waste Management

All dumpsters by NNRO.

Jobsite to be maintained in a clean and orderly condition. Each contractor is generally responsible for depositing debris generated by their work into the NNRO provided dumpster.

26. Contract Closeout

- ~~Substantial and Final Completion as defined in standard Construction Contract A401 and A201.~~
- Punch list procedures: Contractors shall walk through each unit with NNRO to determine the punch list and which items shall be monetized on the final punch list.
- Operation and maintenance manuals of all systems shall be required.

DIVISION 2 – SITEWORK

1. "Excavation" consists of removal of material encountered to subgrade elevations indicated and subsequent disposal of materials removed. The Contractor shall be responsible for familiarizing himself with the existing site conditions. Earthwork includes the following:
 - a. Excavation and preparation of subgrade for building slabs, curbs, walks, pavements and site improvements included as part of this work.
 - b. Dewatering to keep subgrades and excavations dry.
 - c. Placement of topsoil and finish grading of lawn areas included as part of this work.
2. Existing Utilities:

Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult NNRO immediately for directions. Locate and preserve the existing (~~previously abandoned~~) clay sewer lateral at each site.
3. Soil Materials - definitions
 - a. Satisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups GP, SW and SP. (Sand and gravel soil types).
 - b. Restricted soil materials are defined as those complying with ASTM D2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH and PT. (Silts, clays and organic soil types).
 - c. Subbase Material: #53 graded mixture of natural gravel, natural stone, crushed gravel, crushed stone, or recycled concrete.
 - d. Backfill and Fill Materials: Soil materials free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter,
 - e. Drainage Course: Clean, free-draining granular soil containing not more than 10%, by dry weight, passing a No. 200 sieve.
 - f. Topsoil - banked: Contractor shall clean existing topsoil suitable for reuse to remove subsoil, clay lumps, brush, grasses, weeds and other litter, and free of roots, stumps, stones larger than one inch (1") in any dimension, and other extraneous or toxic substance harmful to plant growth.
 - g. Topsoil – new: soil shall have a defined granular or blocky structure and shall be free from non-soil material, brick and other building materials and wastes, potential sharps, hydrocarbons, plant matter, roots of perennial weeds and any other foreign matter or material or substance that would render the topsoil unsuitable for use.
4. Perform excavation to the lines and depths indicated on the plans. Excavate within grading limits to the lines and elevations indicated on the drawings. Notify NNRO if excessive concrete or other unexpected materials are found during excavation.
5. Remove vegetation, trees, stumps, vegetation, debris, "restricted" soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break-up surfaces so that fill material will bond with existing surface.
6. Erosion control

At no time allow water/sediment runoff or soils to spill onto adjacent properties. SC to install and maintain necessary erosion control methods. At minimum SC to install silt fence at property line adjacent to Hill Street.

7. Site Improvements: Excavate for exterior concrete slabs, piers, steps, curbs, sidewalks, pavements and areas etc. to the required depths.
8. Structure Excavation:
 - a. Excavate to the depth indicated on the drawings unless soft spots or other unsatisfactory conditions are encountered. If such conditions occur, the excavation shall be carried to a depth where satisfactory soil conditions may be obtained to provide suitable support for construction required. Such additional depth or excavation shall be filled with compacted granular fill.
 - b. The trenches for column footings, foundations, areas, pits, etc. are to be dug and formed, level, square and to full dimensions and depths indicated on plans. Excavate to a point not less than 1'-6" outside of exterior foundation line to permit erection of forms.
 - c. Grade all floor, walk, and pavement areas to + 1/2" of finish subgrade.
 - d. Shoring and Bracing: All excavations shall be properly shored as required to prevent cave-in. Excavation walls should be sloped, shielded or shored in accordance with current Occupational Safety and Health Administration (OSHA) guidelines and requirements.
9. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
10. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations.
11. Utilities

Water - PC provide new 1" type K copper water line from new tap at city main to new basement. Route water line under footing to future meter location and leave minimum 12" vertical extending above slab. Coordinate pressure test with city of South Bend as required. Code compliant sleeve where copper passes through foundation or concrete slab to protect from abrasion per code.

~~Sanitary - During excavation, identify existing clay tile sewer lateral that used to serve that lot. Excavate existing sewer lateral to a point near the existing city sidewalk. Cut cleanly and provide a Fernco fitting and 4" PVC lateral to the new basement. Run new lateral under the footing or through the foundation wall via sleeve. Provide vertical cleanout at foundation wall and another at Furnco fitting near city sidewalk. All clean-out caps in lawn areas to be inverted type. Mark cleanouts to protect from damage.~~

Plumbing contractor is responsible for setting water valve cap to finish grade.
12. Backfill excavations as promptly as work permits, but not until acceptance of construction below finish grade including:
 - a. Inspections, testing, approval and recording locations of underground utilities.
 - b. Removal of concrete formwork.
 - c. Removal of trash, rubbish and debris.
 - d. Drainage tile where specified.
13. Under slabs on grade

At basement slabs and detached garage slabs provide prepared subgrade of clean native sand & gravel, free of organic matter. Compacted to uniform density.

14. Rough Grading: Work grades to provide for positive surface drainage. Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades. Grade areas adjacent to building lines to drain away from structures and to prevent ponding.
15. Finish Grading: Prior to placement of concrete walks, clean subgrade of all debris, trash, roots, branches and stones larger than 2". Place banked topsoil around building and correct and settlement or irregularities to within 2" of final grade. Do not place organic materials where walks are to be poured.
16. Final Grading: "Harley-rake" site to remove debris, stones, roots, etc. to a minimum depth of three (3") inches and a maximum of four (4") inches in all lawn and planting areas, unless otherwise noted. Remove debris and fine grade smooth. Install 6 cu/yds clean topsoil around structure and distributed as otherwise required to establish final grade and provide a good base for grass seed. Include tree lawn as required.
17. Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
18. Remove waste materials, including excess soils, excess topsoil that cannot be spread to levels indicated, unacceptable excavated material, trash and debris, and dispose off-site in a legal manner.
19. Landscaping

Power rake lot "Harley rake" and remove remaining surface debris from site. Broken concrete, bricks, and debris larger than 3" is to be removed from the top 3"-4" of the site..

Assume each lot will require 2" additional topsoil in a 15' zone around each house to establish final landscape grade.

Grass seed. Grass seed to be general purpose shade/sun blend. Grass seed to be planted after September 1st, 2018.

Watering seed – water seed at initial planting. NNRO is responsible for watering seed thereafter.

Provide vinyl edging, landscape fabric, mulch; (8) 1-gallon shrubs;(4) 5-gallon shrubs around each front porch and approximately 5' around each side. Bed to be approximately 48"-60" deep from face of porch to vinyl edging.

DIVISION 3 – CONCRETE

1. All exterior concrete for walks, step, pads, and driveways shall be min. 4,000psi, max. 4" slump, and limestone aggregate. Concrete placed in the city right of way to be per BOPW specifications.
2. All footing and foundation wall concrete shall be min. 3,000psi, max. 4" slump, and limestone aggregate.

3. Establish the top of fndn wall above finish grade as noted in the drawings. (approx. 24" above finish grade) Finish grade is defined as a point 8" above nearest city sidewalk elevation and slopes away from foundation per site plan UON. Coordinate top of wall height above adjacent sidewalk with NNRO for lots 22 and 24. ~~At ADA units, top of slab to be calculated such that driveway slope is 2% from new city sidewalk elevation. ADA garage floor to slope as otherwise specified.~~
4. Foundation for basement to be 8" thick x 8' tall reinforced concrete walls.
5. Detached garage foundations to be monolithic slab on grade.
6. Reinforcing bar at all foundations per IRC.
7. FC will install anchor bolts within 12" of each corner, either side of doors, max. 6' OC, and within 12" of the end of each sill plate.
8. ~~Install (1) 6" diameter sched. 40 PVC sleeve and cap through each basement floor slab for future radon system. Locate toward rear corner of structure.~~
9. Provide footer drain to sump.
10. Footer drain: 4" diam. HDPE flex perforated pipe in fabric sleeve at basement perimeter. Route to separate min. 20 gallon sump pit in basement. Provide pit and cover. Pump by PC.
11. Sanitary lateral and water utility line from city main to be coordinated as required. FC is responsible to locate these lines in the basement away from any interior stairways or landings. Refer to basement plan for preferred location.
Sewer lateral from point of connection at city lateral into basement to be 6" schedule 35. Exterior clean out to be 6".
12. Under-slab plumbing to be coordinated with PC where occurs. .
13. Detached garage slab: 4" s.o.g. over native sand cleaned of any organic materials and plate compacted.
14. Driveway (where occurs) shall not exceed 2% slope.
15. Existing curbs and city sidewalks to be protected from damage unless cutting is required for utility work. Heavy equipment and trucks should enter and exit each lot from the alley! If alley access is not available provide protectives at existing flatwork. Contractors who unnecessarily damage city sidewalks or curbs may be held responsible for repair.
16. Basement slabs: 4" s.o.g. over 6 mil visqueen vapor retarder over native sand cleaned of an organic materials and plate compacted.
17. At detached garage aprons: flatwork to be 3000 psi concrete and sloped toward alley right of way. Dimensions per plans.
18. Damp-proofing: refer to division 7.
19. Porch deck and stoop/steps to be poured concrete. Refer to plans.
20. Control joints for all slabs on grade – saw cut control joints 25% of slab depth and spaced between 8' min. and 12' max.
21. ~~Alternate A-1: Brick patterned formwork for exterior concrete walls visible to the exterior. Detached garage is not included in this alternate.~~

DIVISION 4 – MASONRY

Masonry veneer product at main house foundation above grade is not included in this RFP.

DIVISION 5 – METALS

1. Fasteners and connections: per details and specifications. Simpson Strong Tie (SST) or approved equal.
2. Steel rebar and reinforcing mesh to meet or exceed IRC 2005 requirements.

3. Steel beam in basement or dimensional lumber equal per framing spec.
4. Aluminum flashing per drawings. .027 minimum thickness.
5. Steel posts in basement located per plans. Posts to be standard steel pipe column. Size per field condition and to meet or exceed IRC 2005 requirements. Bolted connections at top. Tapcon acceptable at base. Secure cap and base at all attachment holes.
6. Window egress well and protective top grade by FC. Corrugated steel area well – Monarch Stif Back II – SB11 49 36 60 egress.

DIVISION 6 – WOOD AND PLASTICS

1. Rough carpentry dimensional lumber shall be No.2 yellow pine or fir; all lumber shall be straight and free from defects. All lumber in contact with concrete shall be treated. All exterior wall studs to be 2x4 and 96 5/8" precut type u.o.n. Wall framing may be SPF #2. All joists and beam members to be SYP #1.
2. Panelization and stick-framing are both acceptable base bid approaches. Please note your chose approach on the bid form. FC will install anchor bolts within 12 of each corner, either side of doors, and max. 6' OC. CC responsible for coordination or installation of additional sill plate anchors as required to meet code.
3. All base bid roof deck and exterior wall sheathing is 7/16" OSB.
4. 1/2" fire resistant plywood at all electrical panels. 3'x4' min. sheet at each house. Install after insulation where occurs.
2. All trusses for residential structures to be designed with 12" energy heels. Detached garage trusses to have conventional heels.
3. Provide and install 2x blocking. CC contractor shall inspect Drawings for all cabinetry, shelves, handrails, towel bars, toilet paper holder, grab bars, mirrors, shower rods, etc. and provide 2x blocking as required. 2x blocking to be provided in all standard unit bathrooms to allow future addition of shower and toilet grab bars per Fair Housing Act. Provide blocking to secure fiberglass shower edges; grab-bars, and add'l framing as required to secure any half walls for lateral stability.
4. Laundry wet wall (including when laundry is in basement)
At any laundry wet wall located on an exterior wall, construct a 2x4 x 48" tall half-wall inside of the exterior wall framing for all laundry mechanical rough ins. 1x trim cap and apron. This framing to be separated from the exterior wall framing with continuous layer of 1/2" OSB sheathing.
5. Soffits (interior)
~~Soffits will be required in the following areas and are subject to minor field revision to accommodate variances in the MEP rough ins:~~
 - a. ~~Kitchen ceiling along bearing wall to cover hvac and pb rough in.~~
 - b. ~~Around vortical ducts at corners of living room~~

~~Soffits are to be as small and tight to MEP rough in as possible. Maintain 1" clearance at HVAC supply ducts.~~

6. Cabinets & tops for Kitchen and Bathrooms
Merillat Basic line, with 'Colony' doors.
Plastic laminate countertop with 4" backsplash for Kitchen; Plastic laminate vanity top for Bathrooms for drop in bowl. Plastic laminate wall cap at laundry half wet wall.
Wall cabinets in kitchen to be 30" tall. Cabinets must include dual slide tracks on drawers.
Vanity base and p-lam top at all bathrooms unless noted otherwise.
- Cabinetry pulls: none u.o.n. (top and bottom door edges have 15 degree reverse bevel)
- Int. Trim Carpenter to provide mounting blocks for range hood as required at wall cabinet over range.
- Provide shop drawings, product data and samples for Owner or Architect approval.
7. Medicine cabinet/mirror in full bathrooms:
Mnfr: Foremost HEWC 1724 Heartland 16.63" x 23.75" x 5.5" deep surface mounted cabinet or approved equal. Two adjustable shelves. Color: White
8. Install the following accessories shown on enlarged plans in each bathroom:
- 1x Towel bar (24") in ½ and ¾ bathrooms.
 - 2x Towel bars (24") in full bathrooms
 - 1x Towel hook
 - 1x Toilet paper holder
 - 24x36 mirror at all ¾ and ½ baths. Mount 40" max. aff.
 - Shower rod at each tub/shower and ADA xfer shower unit. Single, straight rod with screw attachment. 72" AFF.
- Color of bathroom accessories to be brushed nickel. Provide shop drawings, product data and samples for Owner or Architect approval.
9. Interior Trim
Interior door and window casing trim is 1 1/16" x 3.5" colonial factory PFJ. "Picture frame" each window and door opening.
Baseboard is 9/16" x 5.25" colonial base factory PFJ. Cope all inside corners.
1/2" x 3/4" base-shoe at all non-carpeted floor edges.
1x skirt trim at all stairways including basement. Painted. Basement stairs are 2x12 and provided in package B-1.
Interior doors are pre-hung and primed. Refer to Division 8.
10. Shelves
All linen and closet shelves to be 1x12 solid wood or prefinished melamine material.
All laundry room shelves to be 16" deep wire system.
1x cap fabricated from shelf material at any laundry area half walls. Painted.
Cleats and metal shelf support brackets secured to framing. Brackets 48" OC maximum.
Hanging rods to be 1-1/4" dia. wooden dowel.
- ~~11. Stairs from First Floor to Second Floor shall be finished as follows:~~
- ~~▪ Handrail — LJ6010, poplar, stain/polyurethane finish~~
 - ~~▪ Half wall cap — 5/4 oak, Stain/polyurethane finish to match treads. Eased edges.~~

- ~~Stair treads to be 5/4" bullnosed oak at all first to second floor stairs. Finish per Div.9. L.J. Smith LJ-8070 or approved equal.~~
- ~~Risers—1x wood painted to match trim.~~

12. Exterior Porch Columns: Fiber-reinforced polymer composite; HB&G PERMA Cast® 14"x12" x 9' tall square tapered columns with corresponding cap/base; prime and finish paint per manufacturer's requirements. Provide shop drawings, product data and samples for Owner or Architect approval.

13. Exterior Porch Railing: Heng Industries Extreme Vinyl – Vinyl railing system; Style: T-Bird with aluminum reinforced top and bottom rails; 4"x4" support post with traditional top cap; 1-3/8"x1-3/8" spindles; Color: per exterior finish schedule. (white or tan) Field modify balustrade height to 32" from top of concrete deck to top of horizontal rail. Stair handrail remains as required for code compliance.
 Include handrail at one side of rear stoop at all houses. Rail to match front porch system. Submittal required. Provide product data and samples for Owner or Architect approval.
 Manufacturer: Hengs Industries, USA, Elkhart, IN 574-295-1200. (office)

14. Soffits (exterior)
 Aluminum panel. Vented at house. Garage soffits are NOT vented. Color per schedule.

~~15. Front porch soffit
 Beaded wood panels. Stained.~~

16. Exterior Siding: James Hardi cement board lap siding. Install with 4" reveal. Colors per exterior finish color schedule.

17. Exterior Trim: LP SmartSide® - 540 Series reversible trim - smooth surface finish; Pre-Primed – Site finish paint; see Drawings for sizes and locations. Siding & trim contractor to coordinate trim blocking required for mechanical penetrations through siding including but not limited to: dryer vent, furnace vents, electric meter base, elec. service entrance, sill cocks.
 Paint all cut ends prior to installation.

18. Exterior finish schedule:

Address	Roof color		Vinyl lap siding	Garage siding	Corner trim	Painted Trim	Porc h rail system	Guttes & alum. flashing	Soffit & porch ceiling	Entry door exterior color
TBD	Barkwood		Buckskin	Buckskin	5/4 wd corners	White	white	white	white	tbd

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

1. Damp-proofing concrete foundation walls.
Tremco Polypro spray-applied damp-proofing or approved equal.
Apply per mnfr. specifications for a 16 mil (cured) thickness.
Apply from footing to calculated finish grade. Do not apply above finish grade.
Apply before footer drain tile is placed.
2. Cellulose Insulation: see drawings for insulation types, R-values, and locations. Wet blow walls full depth. Loose blow attics to be R40.
3. Fiberglass Insulation: R13 at basement stud wall w/ FR poly scrim over. R21 at box sill and second floor rim joist over spray foam; eaves as required. Fiberglass shall not be used in lieu or as an equivalent for cellulose.
4. PSK poly scrim: at basements provide continuous fire resistant white film over basement exterior wall framing to meet code fire resistance requirements. Lamtec WMP-10 or equivalent.
5. Refer to division 8 for attic scuttle insulation.
6. Spray foam – closed cell
 - a. Box sill seal – at structures with basements: 1” closed cell 2 PCF spray foam from top face of fndn wall to underside of floor deck & min. (R21 unfaced fiberglass batts over)
 - b. Rim joist seal – at two story structures only, between first and second floor – 1” closed cell 2 PCF spray foam from top of first flr top plate to underside of floor deck above. & min. (R21 unfaced fiberglass batts over)
 - c. Behind all exterior wall electrical boxes – low expansion closed cell foam to seal box.
7. Low expansion foam – at windows and doors perimeters. Foam bead to be continuous.
8. Dimensional Fiberglass Asphalt Roof Shingles & underlayment
Acceptable manufacturers: Owen Corning® Oakridge II (30yr); GAF Timberline “Natural Shadow”; approved equal.
Colors per schedule are chosen from the GAF line. Assume similar colors for other manufactures. Submittal required.
Include matching starter strip, ridge cap.
Install per mnfr. specifications over underlayment per drawings.

See Drawings for roof deck details including minimum .027 pre-finished flashing/drips/fascia; continuous ridge vent; and self adhered ice/water shield. Install ice/water shield at roof eaves only.
9. Ice & Water Shield
At eaves and as otherwise required by code.
Acceptable manufacturers: GAF “Stormguard”; Owens Corning “Weatherlock Flex Flexible”; approved equal.
10. Roof Ventilation at Ridge
Continuous ridge vent.
Acceptable manufacturers: Cor-A-Vent; GAF Cobra; or approved equal.

11. Provide continuous gutters and downspouts, with prefinished aluminum and 1/8" per foot slope minimum. Fasten according to manufacturer's recommendation. Provide splash guards at all down spouts. Provide product data and samples for Owner or Architect approval.
Gutters not required at detached garages. Refer to division 11 for information on required rain barrels.
12. Flashing at front porch - EPDM flashing
At structures with basements: Between WRB at box sill and porch/stoop concrete deck provide 24" wide 60mil EPDM flashing under .027 alum. flashing coil stock. Extend flashing min. 6" above top of deck. Flashing provided by CC.
13. Gaskets
1/4" x 3.5" or 4" closed cell polyethylene gasket between top of fndn and mudsill;
14. Sealant –
 - Continuous draftstop bead between the subfloor and the bottom exterior wall plate;
 - Set all ext. door thresholds in continuous bead of sealant. One 10oz tube per door.
 - Set all windows sills in continuous bead of sealant. Alternately, windows may be shimmed up to allow for low expansion foam below sill by insulation contractor. Verify window RO. Coordinate with WRB installation specifications;
 - Where noted elsewhere in specifications;
 - Wallboard gap around bath fans installed into ceilings shared with attic;
 - At attic scuttle per mnfr spec;
 - At mechanical penetrations between unconditioned spaces and conditioned spaces or wall cavities. (basement is considered a conditioned space)

Acceptable sealant manufactures: Dow Corning 795; Tremco Spectrum 2; approved equal.
15. Sealant/caulk – other locations
 - Sealant at tub/flooring edge and stool perimeter noted under division 15.
 - Exposed caulk/sealants at painted trim per division 9.

Caulk used at interior and exterior exposed painted surfaces may be acrylic latex. Paintable.
Acceptable mnfr: DAP alex plus acrylic latex caulk plus silicone 35 year; approved equal
16. Fire resistant caulking to be 3M Fire Barrier Sealant system or approved equal.
17. Gypsum wallboard adhesive
Continuous bead:
between the bottom plate and the drywall; and
between the top plate and the drywall; and
around window and door RO's.
18. WRB moisture and air barrier system
It is the intention of this specification to provide an integrated vapor permeable and air barrier system. Coordinated products and attention to detail are required to achieve this.

Dupont Tyvek system for house and detached garage:
Apply Tyvek Housewrap per manufacturer specifications and with plastic washer 'cap nails. Items noted as "optional" in the Dupont publications are not required except as required for air-barrier application. Penetrations through the WRB to be handled as noted under 'WRB penetrations' below.

- a. General instructions: DuPont Tyvek Water-Resistive and Air Barriers Installation Guidelines for main house, Dupont publication K16282.
Tyvek at detached garage is not required to be installed as an air barrier.
- b. Integral flanged window: Installation Instructions for Integral Flanged Window AFTER Water-Resistive Barrier (WRB) is Installed, Dupont publication K16795.
- c. Non-flanged entry doors: (specified 5/4 casing trim applied after install) Installation Instructions for Non-Flanged Door AFTER Water-Resistive Barrier (WRB) is installed, Dupont publication K25734. This method is for all exterior doors between conditioned and unconditioned spaces. Service doors to garages from exterior are not included.

d. WRB Penetrations for base bid

Penetrations through the WRB shall be sealed as follows:

Electrical wire penetrations for single fixture or device at exterior wall – Dupont StraightFlash per Dupont specification for penetrations. No Quickflash panel required.

4” dryer vent penetration – QuickFlash P-300 flashing panel. Dryer vent closure (by MC) mounted on 5/4 trim block. Joints sealed with Dupont Straightflash.

Range vent hood penetration - Dupont StraightFlash at Broan flanged wall cap. Joints sealed with Dupont Straightflash.

HVAC line-set penetration – QuickFlash A/C U-S “universal squared” lineset flashing panel. Joints sealed with Dupont Straightflash.

Hose bibs – QuickFlash P-50 plumbing flashing panel & Dupont Straightflash.
Footer 1.5” pvc drain sump exhaust - QuickFlash P-150 plumbing flashing panel & Dupont Straightflash.

HVAC vent penetrations (both) – QuickFlash P-200 flashing panel & Dupont Straightflash.

Direct vent water heater – QuickFlash P-200 flashing panel & Dupont Straightflash.

Electrical service penetration – QuickFlash P-150 for 1.5” PVC service conduit & Dupont Straightflash.

Telephone and cable penetrations – one each – Dupont StraightFlash per Dupont specification for penetrations. No Quickflash panel required.

PVC conduit to detached garage (not req’d at garage end) – QuickFlash P-150 & Dupont Straightflash.

MEP contractors to verify all conduit and penetration sizes to match w/ Quickflash size. For add’l information on Quickflash panels refer to:
www.quickflashproducts.com/install_plumbing_post.html

DIVIISON 8 – DOORS AND WINDOWS

1. General: Provide shop drawings, product data and samples for Owner or Architect approval.

Refer to door and window schedules for additional information.

2. Interior doors, hardware, and keys:

Craftmaster 1 3/8" Carrara smooth panel interior door. Pre-hung pine jambs, eased edge stop, and satin nickel hinges. Door panel pre-primed. Finish paint in the field. CC to provide interior pocket door frames by framer where occurs.

Hardware: Schlage lever style handle – Accent or Flair; Finish: Satin Nickel; Passage function for all interior doors unless noted otherwise; Bathroom door locksets shall be Privacy function with standard emergency unlock feature; Closet doors to match; install door bumpers/stops throughout.

Coordinate undercut at all interior doors with HVAC contractor for adequate return air CFM.

3. Exterior Entry doors, hardware, and keys:

Therma-Tru, Smooth Star S606SDL fiberglass; Per schedule; Swing: as noted per Drawings; Finish: painted. No brick-mould trim. Provide exterior casing trim to match windows. Flashing per division 7. .

Garage service door: Therma-Tru, Smooth Star S606SDL fiberglass; Per schedule; Swing: as noted per Drawings; Finish: painted. No brick-mould trim. Provide exterior casing trim to match windows.

Hardware: Front Entry Door - Schlage Front Entry Handleset – F60 Addison; Finish: Satin Nickel. F60ADD619FLAADD

Hardware: Rear Entry and Garage Entry Doors - Schlage security knob and deadbolt; Finish: Satin Nickel. F51A-619 with F series lever and matching deadbolt keyed alike.

Separate deadbolt with thumb turn fnx. Entry sets at front, exterior rear, and detached garage service doors.

Keys: provide owner with minimum 2 sets of keys for each house. Keys for each individual house and garage to match.

Temporary entry doors: Install temporary door panel into installed frames at front and rear entry door locations. Provide keyed construction lock. Provide NNRO with keys for distribution to contractors.

Installation and coordination of permanent doors and locksets/keys is covered in the bid package descriptions.

Temporary entry locksets: During construction install temporary keyed lockset at front and rear doors. Distribute keys to NNRO only. Change out to finished locksets after final cleaning.

4. Garage Door: Steel Insulated raised panels (no windows); 1/2 hp door operator; hazard detection; (2) remote operators; and (1) wired push button operator located at garage interior either adjacent to service door (detached garage) or adjacent to door into house (ADA units). Acceptable manufacturers: Overhead Door Co. – Thermacore 297 Series; approved equal. Color t.b.d. from standard colors.

5. Attic access door:

22"x30" Air-tight attic access scuttle door. Minimum R42. No lock option required.

Acceptable manufacturers: Battic Door EZ Hatch 42 or approved equal. Install per mnfr. specifications with sealants per division 7. Interior Trim Carpenter to provide and install.

Rough opening size is noted on the drawings.

6. Windows:
Andersen Silverline 3900 Series double hung windows are accepted. Energy Star low-E glazing. White. Tempered where required by code. With screens. Maximum u value = .29.

DIVISION 9 – FINISHES

1. Gypsum Board: 1/2" thick board on all walls, ceilings, and stair ceilings leading to the second floor; 1/2" thick water resistant board on all walls and ceilings at tub/shower locations. Walls to be finished smooth. Uniform light knockdown texture on ceilings. Rated assemblies as required per drawings/wall schedule.
2. Paint Systems: Sherwin-Williams® ; approved equal

Interior Paint

Preparation of all surfaces – caulk and nail hole spackle

Walls: one (1) coat primer + two (2) coat Eggshell finish; assume two (1) color different than ceiling color for all walls.

Ceilings: one (1) coat primer + one (1) coat flat finish; Sherwin-Williams ProMar 200.

Window casing, doors, base: (1) coat Semi-Gloss Finish (trim installed primed) and touch up as required; Sherwin-Williams Pro-Classic

Walls: one (1) coat primer + two (2) coats satin finish; Sherwin-Williams Harmony Low VOC.

Windows: prefinished

Stair handrail and wall cap: stain/polyurethane;

Stair treads (at non basement stairs): carpet

~~Stair risers (at non basement stairs) : painted risers to contrast with stain/poly treads.~~

~~Basement steps – no finish on treads. Skirts painted.~~

Note that windows are installed pre-finished white semi-gloss.

Interior colors:

All ceilings to be painted SW6119 “antique white” flat matte

All interior non-bedroom walls to be painted SW6106 “Kilim Beige” eggshell

All bedroom and bedroom closet walls to be SW6108“Latte” eggshell

Half wall caps and handrails stain and poly finish.

Provide color sample submittal for Owner or Architect approval.

Exterior Paint

Preparation of all surfaces, caulk, and prime paint prior to applying finish coat.

Trim: Smooth pre-primed surface - two (2) coat Semi-gloss exterior latex

Composite Columns: To match railing, semi-gloss finish as per manufacturer’s requirements.

Provide paint color sample submittal for Owner or Architect approval.

See division 6 for description of aluminum soffit, fascia, porch ceiling, etc.

Exterior face of exterior entry doors (two per house) to be painted an accent color

Accent colors: (refer to Division 6, exterior finish schedule for locations) TBD

Option #1: ~~SW6433~~ “Fiery Brown” (a dark red/brown)

~~Option #2: SW6433 “Inverness” (a dark green)~~

~~Option #3: SW6300 “Burgundy”~~

~~Option #4: SW6629 “Jalapeno” (a terra cotta)~~

~~Option #5: SW6426 "Basque Green" (green similar to the accent shakes)~~
~~Option #6: SW6307 "Fine Wine"~~

Assume that all colors are deep (clear) base colors.

Caulk used at interior and exterior exposed painted surfaces per division 7.

3. Floor finish:

All vinyl flooring must meet Carpet and Rug institute's Green Label certification.

Vinyl sheet goods – glue down full spread. Installed per mnfr. specifications.

Acceptable manufacturers: Armstrong 62A66 "Ventara" Color: Baron; or approved equal.

Underlayment to be 6mm 5-ply. Popply or approved equal.

Floor preparation & leveling compounds: Ardex K-15 / Feather Finish, or approved equal.

Clear silicone sealant at edge of tub/shower units.

Submittal on vinyl and underlayment required.

Location of vinyl: Vinyl flooring to be at all kitchens, bathrooms, laundry areas, living rooms, and a 3'x3' area inside front and rear door if not otherwise noted as vinyl.

4. Carpet Floor finish:

All carpet/pad must meet Carpet and Rug institute's Green Label certification.

Carpet to be min. 35oz. nylon cut textured pile with min. 3.5 wear rating and integral stain repellent. Color t.b.d.

Install over .5" rebond pad with min. 6lb density.

Acceptable manufactures: Shaw; Armstrong; Mowhawk; or approved equal.

Submittal on carpet and pad required.

Location of carpet: Carpet to be at all bedrooms, hallways outside bedrooms, ~~and living room areas.~~

Transition strips at all vinyl/carpet intersections and nosing at top of basement stairs.

Transition strips to be alum. – color: t.b.d.

5. Floor finish – stairs: refer to interior painting, division 9.

DIVISION 10 – SPECIALTIES

1. House Numbers – metal min. 4" tall. Color: Black. Coordinate location of house numbers with NNRO.

2. Mailboxes – USPS approved surface mounted horizontal metal mail box. Color: Black. Minimum size: 15" wide x 6" tall x 3" deep. Locate at front porch. Mount +48 above porch floor. ~~(+42" at ADA units.)~~

DIVISION 11 – EQUIPMENT

~~1. Appliances: NNRO to provide the following appliances:~~

No range, dishwasher, or refrigerator installed or provided in this scope of work.

DIVISION 15 – HVAC

1. Contractor shall furnish and install complete and efficient residential HVAC system. All work shall be in accordance with all applicable codes and is subject to City and NIPSCO inspection(s). Make all final connections to City water and sewer systems and NIPSCO gas.
2. System design: HVAC contractor to provide written heating and cooling calculations to verify equipment and ductwork sizes. Manual J. Provide these calculations after contract award and before start of work. Coordinate any required adjustments or changes with NNRO.
3. HVAC equipment: Acceptable HVAC equipment manufacturers are: Coleman; Carrier; Rheem; Lennox; Goodman; Armstrong.
Gas furnaces shall be minimum 95% efficient.
Provide filter slot with sliding closure panel. Filter to be standard 1" type and sized for airflow. Provide filter. AC unit shall meet Energy Star product criteria. >=SEER 14.
4. Ductwork supply and return to each major room and bedroom. All ductwork joints, seams, collars, cleats, and connections to be sealed with specified mastic or UL181 rated tape. Framed bays that served as RA chases to be checked and sealed/caulked prior to wallboard installation, especially at cavity tops and where they connect through floor assemblies. Except for bathroom ventilation, no ducts are to be located in unconditioned spaces or attic. No flex or semi-rigid duct is permitted unless otherwise noted.

Thermo-Pan duct panning board is permitted at basement ceilings for return air chases. Panning installed per manufactures specifications to minimize duct cavity leakage. Coordinate pan installation with any box sill foam insulation.
5. Provide gas supply piping to all listed gas appliances. Shut offs, drip legs, and other as required. Coordinate gas line pressure test with city of South Bend inspector at same time as rough-in inspection. Pipeflex is approved.
Installation, testing, and inspection of the gas piping from the gas meter location to the furnace are to occur during rough-in. All exterior mechanical penetrations through the WRB per division 7.
6. Cutting, notching, and drilling or structural members per the IRC.
7. MC to provide and install all dryer vent ducts, exterior wall vent caps, recessed wall boxes behind dryers. Seal all venting ductwork joints and connections with alum. tape or fluid applied mastic duct sealant. Recessed clothes dryer box may be plastic type. No flex or semi-rigid duct is permitted unless otherwise noted.
8. Exterior dryer vent closure mounted on 5/4 wood trim block sized for vent. Acceptable dryer vent caps are: Heartland; Lambro Ind. 289W; approved equal.
9. Thermostat:
Hardwired. Programmable. Honeywell RTH7500D or approved equal.
- ~~10. The following appliances are provided by NNRO, uncrated, and set in place by appliance contractor, leveled and hooked up and tested by MC:
Gas range, including anti-tip device~~
11. The following appliances provided by MC, uncrated and installed by MC, controls and wiring by EC:

Range hood – vented to exterior at kitchen range. Broan QML30WW. 3.25" x 10" ducted to exterior via wall cabinet above unit. Provide Broan 639 wall cap.
Duct sealing and sealant at WRB per Division 7.

Main bathroom exhaust fan: Central bathroom exhaust fan to be Broan Ultra ZB80L. 4" rigid ducted. Sealed duct joints. Wired for continuous operation to meet ASHRAE Standard 62.2. Light, night light, and fan operation switched separately.
For sidewall, vent fan wall cap to be Broan 885BL.
For soffit, vent fan wall cap to be Lambro 143W; Duraflor; or approved equal. White. Flex aluminum duct allowed for connection of cap to rigid duct penetration at WRB only.
Duct sealing and sealant at WRB per Division 7.
Electric control device provided by EC.

Second bathroom exhaust fan: For houses with more than one bathroom that is not a half bath, additional exhaust fan to be NuTone 769RFT. 4" rigid ducted. Sealed duct joints. Fan and light switched separately. No continuous operation required.
For sidewall, vent fan wall cap to be Broan 885BL.
For soffit, vent fan wall cap to be Lambro 143W; Duraflor; or approved equal. White. Flex aluminum duct allowed for connection of cap to rigid duct penetration at WRB only.
Duct sealing and sealant at WRB per Division 7.
Electric control switch provided by EC.

~~Half bath exhaust fan: For each half bath, provide and install NuTone #763 w/ 4" rigid ducted. Sealed duct joints. Fan and light switched separately. No continuous operation required.
For sidewall, vent fan wall cap to be Broan 885BL.
For soffit, vent fan wall cap to be Lambro 143W; Duraflor; or approved equal. White. Flex aluminum duct allowed for connection of cap to rigid duct penetration at WRB only.
Duct sealing and sealant at WRB per Division 7.
Electric control switch provided by EC.~~

DIVISION 15 - PLUMBING

1. Contractor shall furnish and install complete and efficient residential plumbing system. All work shall be in accordance with all applicable codes and is subject to City inspection(s). Make all final connections to City water and sewer systems.
2. Provide 5/8" water meter 'ram's horn' base and fittings as required for City of South Bend 5/8" water meter. Installation of a ball valve shut off at the 1" copper water supply line is to occur during plumbing rough in. Ram's horn may be installed at trim out, however we prefer that it is also installed at rough in. Refer to Division 2 (site contractor) for information on water supply line from city main.
3. Sewer lateral to basement interior by Excavation Contractor to a location under footing. PC to coordinate all below slab plumbing, floor drains, and sump baskets with site and foundation contractor(s) as required.
4. Provide and install PEX water supply lines to all plumbing fixtures, water heater and appliances. No PEX joints permitted inside wall cavities except at necessary branch fittings to fixture termination devices. Either color code (a) all cold as blue and hot as red or (b) all white.
Distribution system to be branch layout.

Install PEX per mnfr. specifications with appropriate supports, clips, and required accessories.

Recessed laundry box at all washer/dryer locations.

~~PEX layout to include cold/hot manifolds and home run lines to each fixture.~~

5. All exterior mechanical penetrations through the WRB per division 7.
- ~~6. Provide gas piping to furnace, range, water heater, and clothes dryer. Shut off/valve at each termination. Coordinate exterior termination location with NNRO and NIPSCO. Mechanical penetrations through the WRB per division 7.~~
7. Provide braided SS connections at stool, lav., and kit sink. Locate stool connection 3" above top of baseboard trim for stools located against interior walls. Quarter turn shut off valve at each plumbing fixture connection. Dishwasher connection in kitchen sinkbase cabinet to be dual valve such that dishwasher can be isolated from the kitchen faucet.
8. Provide and install two (2) exterior hose-bib faucets, freeze proof. Plumb separate from future soft water system loop. Ideally, the hose bib toward the rear of each house is near the proposed rain barrel location.
9. Provide and install (1) PVC basement level floor drain tied to sewer lateral. Assume that sewer lateral is below basement slab. If sewer lateral exits fndn via sidewall PC to provide a sump pit, pump, backflow prevention, and waste line plumbed to main sewer drain.
10. Provide and install footer sump pit, pump, and piping to exterior of building. Provide Quickflash panel for drain pipe as noted above.
11. Cutting, notching, and drilling of structural members per the IRC.
12. Fire caulk to be 3M Fire Barrier Sealant system or approved equal.
13. Sealants – clear silicone sealant at base of stool.
14. PC to protect tubs during const. w/ cardboard or equivalent tub liner.
15. Water heater
Provide and install 40 gallon, quick-recovery power-vent gas water heater. Acceptable water heater manufacturers are State; Rheem; A.O. Smith.
Energy factor to be ≥ 0.67 . 6 year limited tank warranty. Energy Star rating required. Water heater insulation blanket is not required. Water heater installation must have heat traps in the piping connection design.
16. Garbage disposal
Provide and install garbage disposal. Switched at wall per division 16. Product noted below.
17. Refer to Drawings for Site Plan, Floor Plans, Elevations (for exterior wall openings), and Mechanical/Electrical Systems Reference Plan.
18. PLUMBING FIXTURES

Provide shop drawings and product data for Owner or Architect approval. Verify left/right handed for each location per plans and site plan. (that is, check for mirrored plans)

BATHROOMS:

Toilet: Delta Corrente C43904-WH (HET). Max. 1.28 gpf. With coordinated seat/lid, wax ring; Color: white Clear silicone at base.

Lavatory Faucets: Delta Foundations B2515LF-PPU (1.5 gpm)

Shower Faucet: Delta Foundations BT13010 valve trim (where applicable) plus Delta 7-spray hand held shower 75701 (2.0 gpm)
Handheld shower faucet is for all shower units and ADA Xfer showers.

Tub/Shwr Faucet: Delta Foundations B114900 (fixed head shower is 2.0 gpm)

Tub/Shower: 60" fiberglass tub/Shower unit. Color: white.
Acceptable mnfr: Sterling Ensemble 71124106; Aker ; approved equal.

~~Shower 36x36 fiberglass shower unit. Verify L/R. Color: white.
Acceptable mnfr: Sterling; Aker ; approved equal. Verify L/R. Color: white.~~

Neo-Angle Shower Acceptable mnfr: Sterling. Model: Intrigue 39x39 #72041100. Color: white.
Shower door unit to be Sterling Intrigue SP2276A-38N.
Shower walls to be Sterling Intrigue tile wall set 72044800-0.

~~ADA Xfer shower fiberglass, color: white
Acceptable mnfr: Sterling 62050125-0; Aker OPS-3636-141274-R/L;
approved equal. Verify left/right compliance per ADA.~~

Ped sink at ½ baths ProFlo PF1045WH (leg) & PF5004WH (bowl)

KITCHEN :

SS Kit Sink: Sterling Middleton 20-Gauge Double-Basin Drop-In model #R14708-4-NA (coord. 3 or 4 holes w/ faucet soap dispenser)

Kitchen Faucet: Delta B4310LF-SD. Chrome. ADA compliant. 1.8 gpm (Verify that faucet comes with accessory soap dispenser before ordering sink)

Garbage Disposal: Insinkerator Badger 1. Switch at wall.

DIVISION 16 - ELECTRICAL

1. Contractor shall furnish and install complete 200 amp electrical service.
40 slot main breaker panel surface mounted on fire resistant plywood panel per division 6.
Acceptable manufactures: Square D; Siemens ITE;
Clearly print description of each circuit at breaker box.
All work shall be in accordance with all applicable codes and is subject to City of South Bend and AEP inspection(s).
Electrical service to the house is to be underground.
2. Meter bases to be installed on trim block provided by siding contractor. Do not install meter base directly to sheathing or WRB. Coordination is required per division 7.
3. Temporary power
Provide 4x4 post, plywood panel, meter base, breaker box, and (2) quad exterior GFIC receptacles. Overhead service cable coordinated with NNRO and AEP. EC to provide mast if required by AEP.
4. Coordinate cat-5 and cable services, installation, routing and connections with NNRO.
Coordinate with utility providers for underground drops. Provide cable connection in each

bedroom and living room. Route each cable to location on plywood adjacent to electrical panel. Leave looped at panel without termination.

No daisy-chain configuration – each cable and coaxial wire is separate. Terminate each cable at wall plate.

5. All exterior mechanical penetrations through the WRB per division 7.
6. Devices
All lighting devices and lamps provided by NNRO unless otherwise noted. Delivered to site by NNRO.
Door bell, utility 'key-less' fixtures, all non-lighting devices, and electrical devices not otherwise assigned to others in this RFP are to be provided by EC.
7. All devices per code. Color of all devices and cover plates to be light almond.
8. Combination smoke and CO detectors per code. Hardwired with battery backup per code. Hush feature. Acceptable manufactures: Kidde; First Alert.
9. Provide one ceiling fan j-box per house. Separate control for light/fan. Location to be finalized in the field. Lutron wall mounted fan speed control provided by EC. Ceiling fan/light fixture provided by NNRO.
10. Refer to Drawings for Floor Plans, Elevations, and Mechanical/Electrical Systems Reference Plan.
11. Doorbell - hardwired chime and button. Button at front door. Exterior doorbell button must be self-lit.
12. (1) 20A GFIC protected circuit to detached garages via buried wire. Wire may be direct bury per code. Draft seal conduit penetration at house WRB per division 7.
13. At basements, provide basement level power and/or receptacles as required for water heater, furnace condensate pump, sump pump (if installed); footer drain sump, and future water softener system. (3) key-less switched fixtures in each basement switched to top of basement stair. (2) keyless switched fixtures per garage.
14. Light switches to be located 48" above the finished floor as measured to top of rough in box.
15. Motion light. Install one NNRO provided switched motion light at garage and one at rear of main house.
16. Provide (1) 220v dryer receptacle at laundry location at each house. Breaker as required. (gas also provided)
17. Provide (1) 220v range receptacle at kitchen range location. Breaker as required. Provide 110v range receptacle at same location. (gas also provided)
18. Exhaust fans and fan/lights
Wire main bathroom fan for continuous operation by switching the red (high speed) leg and leaving black wire (low speed) hot. At all other bathroom, all fan features wired for switch function.
Range hood power – receptacle in cabinet over range hood.
(HVAC contractor to provide fan units, ductwork, caps, and any penetrations for exhaust fan ducts at exterior)

EC to provide exhaust fan controller at each MC provided fan location.
Broan 62V (ivory) at main (common full bath) location. (2 switched plus dial)
Broan 57V (ivory) & separate light switch at all additional bathrooms.

19. Coordinate power to mechanical and plumbing systems provided by MC and PC:
Garbage disposal switched at wall.
Gas water heater.
Ventilation systems listed above.

20. The following appliances are provided by NNRO, uncrated and set in place by appliance contractor, and hooked up and tested by EC:
None.

- ~~21. The following appliances are provided by NNRO, uncrated and set by appliance contractor, installed by PC, and wired by EC:
Dishwasher. Whip will be provided by appliance vendor. To recep in sink base cabinet.~~

Triangle Bid Form – For Package: (fill in one bid package letter per bid form)

Issued date: Friday, August 25, 2017

Due date: Friday, Sept. 15, 2017

Having thoroughly examined both the Contract Documents and the site conditions, I hereby propose to furnish all labor and material to accomplish the indicated Bid Package for the following prices:

- **Base bid:** I agree to perform the Work of Bid Package for the lump sum of:

_____ (\$ _____)

- My full and complete markup on any positive value change orders will be _____ %

Alternate work: For the work described below and elsewhere in the Contract Documents, you may revise the foregoing Base Bid as follows:

For: _____ Add (+) Deduct (-)

No alternate work is requested	\$ _____
(please attach any voluntary alternates on a separate sheet)	

I acknowledge receipt of the following Addenda:

Addendum No: _____

Addendum No: _____

Include with this proposal the following: (just one copy if submitting more than one proposal)

- the completed AIA A305 if applicable
- the requested references as described under "References" above
- voluntary alternates if any

Signed: _____ Title: _____ Date: _____

Company: _____

SOUTH BEND HERITAGE FOUNDATION

803 LINCOLNWAY WEST SOUTH BEND, IN 46616

PHONE (574)289-1066 FAX (574)289-4550

South Bend Heritage Foundation
(Northeast Neighborhood Redevelopment Organization)
803 Lincolnway West
South Bend, IN 46616

Requirements for Certificates of Insurance

• **Commercial General Liability Requirements:** \$1,000,000

• **Commercial Auto Policy Requirements:**
Minimum Combined Single Limit per Accident: \$500,000

NOTE: If using a personal vehicle you must carry non-owned/hired auto liability

• **Workers Compensation and Employers Liability***
Minimum Employers Liability Limits: \$100,000/\$500,000/\$100,000

• **Umbrella Liability Requirements:**
Minimum Limits \$1,000,000

Additional insured:

Northeast Neighborhood Redevelopment Organization, its subsidiaries and agents must be listed as an additional insured.

*NNRO will accept a valid Indiana Department of Revenue Workers' Compensation Clearance Certificate for Independent Contractors in lieu of Workmans Comp coverage. Sole proprietors and/or partnerships meeting certain criteria are eligible for apply. Information and applications are available on line at the Dept. of Revenue's website at www.state.in.us/dor.

Bidder References

Issued date: Friday, August 25, 2017
Due date: Friday, September 15, 2017

Property: Triangle 2017
All Bid Packages

Please provide no less than two prior client names and contact information in which your company demonstrated an ability to deliver a project under a demanding schedule or otherwise met your clients schedule expectations.

1		
2		
3		

Bid packages – General Notes

The following scope descriptions break the project down into bid packages. These descriptions incorporate the bid documents by reference and are not complete specifications. Nor are they intended to provide a comprehensive description of general items of your work, means and methods, or coordination of work with other trades. You are responsible for reviewing the entire set of drawings to understand how your work fits into the overall project and schedule. If you have any questions or find discrepancies between the following bid scope descriptions and the drawings/specifications please notify NNRO.

In general, this document assigns elements of work to the following sub-contractors:

Bid Package	Portion of work	Contractor Reference
A1	Excavation, sanitary sewer	Excavation Contractor
A2	Foundation, flatwork, damp proofing	FC / Foundation Contractor
B	House and garage shell	CC / Carpentry Contractor
C	House and garage siding and trim	Siding Contractor
D	Plumbing + site water & sewer connections	PC / Plumbing Contractor
E	Electrical	EC / Electrical Contractor
F	HVAC	MC / HVAC Contractor
G	Insulation	Insulation Contractor
H	Gypsum wall board hang & finish	Wallboard Contractor
I	Interior painting	Painting Contractor
J	Interior trim, doors, cabinetry	Interior Trim Contractor
K	Floor finishes	Floor Finish Contractor
L	Landscaping	Landscape Contractor
M	Gutters & downspouts	Gutter Contractor
N	Garage Overhead doors & operators	OHD Contractor
O	Final cleaning	Cleaning Contractor
P	Photovoltaic systems	PV / Photovoltaic Contractor

The General Contractor reference is NNRO / Northeast Neighborhood Redevelopment Organization.

Each of the following bid packages includes the general conditions as outlined in the RFP.

Each of the following bid packages includes debris removal responsibilities as outlined in the RFP.

All bid packages will receive their notice to proceed on the same date.

Package A1 – Excavation & Sanitary Sewer (Excavation Contractor)

General – Bid package A generally includes work described in specification divisions 0, 1, 2, and 3. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Main house foundation and garage will be staked for excavation by NNRO prior to excavation.

Silt fence at city sidewalk per city of South Bend standards.

Excavate to required footing depth as required and as specified relative to finish grade.

Excavation Contractor is responsible for coordination of all city required inspections for sanitary sewer lateral per division 2. (PC is responsible for water service tap. Refer to plumbing spec.)

Excavation Contractor to include any excavation & sewer tap fees, all required excavation and other related permits, road closures, excavation, and any curb, sidewalk, and/or roadbed repair required for water utility installation from water main to foundation. This includes careful replacement of cobblestone pavers, curb, and/or city sidewalk as required.

Excavation Contractor to provide excavation for main house and specified utilities. Include site clearance of all shrubs, scrub trees, any vegetation as required to complete package A work. Include window well and metal top grate.

Garage monolithic pour to be completed at the same time as the lot's main house foundation. Coordinate staging and removal of excess soil materials as required. All soil that is banked/stockpiled for backfill to remain on NNRO owned property.

Provide sleeve for sewer lateral at foundation wall if sewer lateral cannot be run below footing.

Excavation Contractor to bank/stockpile any existing topsoil for reuse at finish grade.

Excavation Contractor to remove all excess soils from the site.

Site grading -

Excavation Contractor to establish finish grade adjacent to main house at 6" above nearest city sidewalk.

Grading will be established in 3 stages and in the following bid packages:

Backfill & rough grade including removing excess soil from lot – Package A1.

Finish grade incl. spreading any banked topsoil – Package A1.

Final landscape grade including additional 12 cu/yds topsoil & 4 cu/yd mulch per lot – Package L.

Package A2 – Foundation, flatwork, damp proofing (FC Foundation Contractor)

Excavation contractor will excavate such that the top of fndn wall is above finish grade as noted in the specifications & drawings. Finish grade is defined as a point 6" above nearest city sidewalk elevation and slopes away from foundation per site plan UON. Driveway or garage apron shall not exceed 2% slope.

For freestanding garages, OHD threshold to be at a height to provide an apron with a 1:48 min. and 1:24 max. slope away from garage.

FC to provide foundation and slab for each structure, garage, and all associated flatwork. Include window well and metal top grate.

For bidding purposes you may assume that a pump truck will not be required.

Work in the city tree lawn (in the R.O.W.) is not included in this bid package unless otherwise noted. This includes tree removal, trimming, stump removal. Any tree work required in order to facilitate site utility work will be considered on a case by case basis.

Removal or repair of existing curb cuts or other existing features outside the property lines are not included in this bid package unless otherwise noted.

Existing curbs and city sidewalks to be protected from damage unless cutting is required for utility work. If site has an alley available, heavy equipment and trucks should enter and exit the lot from the alley!

Footings, walls, and slabs per specifications and drawings. Include concrete porch deck and rear stoop.

Provide aluminum AND self-adhesive flexible flashing over Tyvek WRB at framed box before concrete front and rear porch/stoops are poured. Self-adhesive flashing to be Hohmann & Barnard "Textroflash Sando-seal" or approved equal.

FC to provide site walkways, steps, and garage apron per plans. Garage apron to be pervious concrete. Refer to note above for flatwork schedule.

FC to coordinate any noted under-slab plumbing with PC as required.

FC is responsible for footer drainage tile, associated sleeve, and 20 gallon HDPE sump basket at structures with basements.

FC to provide damp-proofing at structures with basements.

Package B – House & garage shell

General – Bid package B generally includes work described in specification divisions 0, 1, 6 and 7. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Package B to provide house wall & floor framing, basement steel columns, beams, headers, stairs, trusses, windows & exterior doors, exterior locksets, WRB air & moisture barrier integrated system, aluminum drip edge, ridge vent, roof system, and associated sealants, connectors, all as otherwise required to provide a completed building shell.

Porch beams to be supported at exterior wall on face mounted brackets. Tyvek WRB to be continuous under brackets.

Package B contractor is responsible for coordination, delivery, and staging of all package B materials to the job site. For bidding purposes, assume that NNRO will not provide secured on-site storage facilities such as storage trailers or containers.

CC to provide temporary entry door panels and locksets at front and rear entry. Temporary locksets to remain in use until completion of bid package O (final cleaning) at which time the CC will install the permanent locksets.

NNRO is responsible for distribution of temporary construction lockset keys to all trades as required.

No interior soffits are indicated.

Framing contractor to provide blocking for wallboard at fiberglass tub and shower enclosure flanges.

Punch list will be distributed to framing contractor During MEP rough-in so that any chase/soffit work and punch can be completed at the same time. Framing will return as needed to complete any additional framing issues.

This package includes air tightness features as described in Division 7.

Install integrated WRB system per spec Division 7

Fire resistant plywood for electrical panels provided by CC and installed by EC.

CC to provide 2x blocking for all grab bars, handrails, and as otherwise required u.o.n..

Blocking is required at ALL bathroom stools for future grab bar installation. Note that PC is responsible for blocking as required at shower valves, heads, tub fillers, etc.

Align framing to coordinate with range hood vent ducted to exterior via side-wall. Range hood duct is 10" wide and centered on range.

All window screens to be stored together in the basement or as otherwise directed. CC contractor to return to each house for screen installation after that house's interior painting and exterior siding is complete.

Refer to exterior finish schedule in package C for drip edge and roof color.

Detached garage shell

Provide garage framing, trusses, service door, Tyvek WRB, drip edge and roof system.

Refer to exterior finish schedule in package C1 for drip edge and roof color.

Package C –, House & Garage siding and ext.trim, porch trim, and ext. painting

General – Bid package C generally includes work described in specification divisions 0, 1, 6, 7. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Package C contractor to inspect WRB for completeness prior to starting work.

This package includes:

Exterior porch balustrade and stair rail system

Front porch soffit and columns

Rear stoop rail (type and color)

Accessory siding blocks – coordinate vinyl system accessory blocks and 5/4 trim blocking with mechanical and electrical contractors. Blocks to be painted by siding contractor prior to installation by siding contractor.

Provide vinyl system mounting blocks for all exterior electrical fixtures.

Provide 5/4 painted wood (Smartside or approved equal) mounting blocks for meter base; dryer vent (refer to division 15 HVAC); range hood vent; Confirm size and location of mounting blocks with NNRO and appropriate MEP trades.

Roof drip edge is provided under package B.

Detached garage siding, soffit, fascia, and trim per schedule.

Coordinate 5/4 mounting block for dryer vent with HVAC contractor.

Paint all exterior trim prior to installation. Paint exterior portion of entry door frames in the field to match adjacent casing trim.

Exterior finish color schedule:

Refer to division 6.

Mechanical Systems – General notes for package D, E, & F (see below for individual trade work)

Schedule of primary MEP rough-in work

Most mechanical penetrations through the WRB will be handled with Quickflash panels provided by the mechanical contractor making the penetration. It is the MC, EC, and PC's responsibility to provide and install the appropriate Quickflash panel per mnfr. specifications after the Tyvek is installed. Siding contractor is responsible for taping all penetrations (Quickflash or otherwise). All mechanical penetrations through the WRB must be made and flashed before siding and trim work begins. Refer to division 7 for more information on MEP penetrations through the WRB.

All mechanical penetrations through the plane between attic and floor below to be draft-stopped with sealant or fire caulk. Contractor making the penetration is responsible for sealant.

Assume that plumbing, electrical, and HVAC trim-out will follow in a similar pattern after package J is completed for each group.

Package D – Plumbing

General – Bid package D generally includes work described in the specification divisions 0, 1, and the plumbing section of divisions 15. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Under-slab rough-in to be coordinated with bid package A schedule and will occur before the primary rough-in period.

Complete plumbing rough in is defined as ALL waste, drain, supply piping, and copper elbow terminations at each fixture. Include rams horn and shut off.

PC to provide 1" copper water service from city main to inside basement. Include any tap fees, all required excavation and other related permits, road closures, and any curb, sidewalk, and/or roadbed repair required for water utility installation from water main to foundation. All work in the city right of way per BOPW specifications.

FC will provide sewer lateral to just inside basement interior per plans.

Under-slab plumbing as noted on plans and per specifications.

Recessed washer box at W/D locations per plans.

Blocking – PC to provide 2x blocking or equivalent secure bracing as required for showerhead, shower valve, tub filler, etc.

Plumber is to provide tub/shower units onsite at the appropriate time during framing to set into position. Plumber is responsible for arranging any delivery, lifting, or other coordination required for installation of all plumbing fixtures. Plumber is responsible for reinstallation of any studs removed to facilitate installation of tubs and showers.

Package E – Electrical

General – Bid package E generally includes work described in division 0, 1, and 16. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Schedule: refer to Schedule of primary MEP rough-in work. (page 7 above)

NNRO to establish AEP electric power accounts for each address as required. NNRO is responsible for all electric utility bills during construction.

Exterior GFIC boxes to be surface mounted.

200A service. Assume underground feed. Provide and install fire resistant plywood panel for panel per division 6.

Doorbell and chime per spec.

Temporary power per specification.

Locate temporary electric panel at each house rear yard and coordinated with site plan and AEP.

Package F – HVAC

General – Bid package F generally includes work described in specification divisions 0, 1, and the HVAC section of divisions 15. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Schedule: refer to Schedule of primary MEP rough-in work. (page 7 above)

Gas furnace; gas water heater; gas range.

Gas supply line from meter to listed gas appliances.

Furnace per spec. located per drawings.

Furnace combustion and exhaust air piped to exterior with 2" schedule 40 PVC pipe. Coordinate vent locations with framing contractor so that vent boots are properly located.

Ventilation

Contractor to provide and install bathroom ventilation fan and coordinate power and control with the Electrical contractor for constant operation.

Contractor to provide and install range vent hood ducted to exterior.

Contractor to provide and install recessed dryer box & dryer vent to exterior through boot at WRB to specified dryer vent cap. Install over 5/4 exterior trim block by other.

Package G – Insulation

General – Bid package G generally includes work described in divisions 0, 1, and 7. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Pre-gypsum wall board but after mechanical rough in:

Foundation interior – R13 fiberglass with white FR poly scrim.

Box sill seal – at structures with basements: 1" closed cell 2 PCF spray foam from top face of fndn wall to underside of floor deck & R21 fiberglass batts

Rim joist seal – at two story structures btw first and second floor – 1" closed cell 2 PCF spray foam from first floor top plate to underside of floor deck above. R21 fiberglass batts.

Behind all exterior wall electrical boxes – low expansion closed cell foam to seal box.

Exterior walls - cellulose in 2x6 cavities blown to min. 3.2 lb/cf.

Draft stop package – low expansion foam at all ext. windows and doors.

Sealant at exterior wall framing plates and grouped studs.

Attic draft chutes

Post-gypsum wall board:

Closed cell foam or similar effective draft-stop around j-boxes and bathroom fan boxes at ceilings adjoining attics. This is to seal gap between GWB and device.

Blown cellulose in attic to minimum R-50.

Gasket and insulation at attic access panel provided by other in bid package J.

Package H – Gypsum Wall Board

General – Bid package H generally includes work described in division 0, 1, and 9. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Hang and finish ½” GWB for interior walls and ceilings. All GWB to be adhered to top and bottom plates and around all windows with sealant per spec. Screw fasten.

It is important to note that all GWB this project to have minimum 50% recycled content.

Debris – this bid package includes debris removal per general spec. to NNRO provided dumpster which may be at a nearby house location (not the same lot).

Package I – Interior Painting

General – Bid package I generally includes work described in specification division 0, 1, and 9. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

All interior trim is installed factory-primed. Paint finish coat after installation by package J contractor.

All window interiors are prefinished white unless otherwise noted.

Painting contractor to fill nail holes, caulk, sand, paint all trim and doors as required. All interior trim painted SW (t.b.d.) semi-gloss. (a white color to match prefinished windows)

Contrasting finish at interior stairs – paint all risers trim color. Stain treads with poly finish.

Package J – Interior Trim, Doors, and Cabinetry

General – Bid package J generally includes work described in specification division 0, 1, 6 and 10. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Schedule:

Attic insulation will occur during package J work. Install insulated attic access panel prior to start of attic insulation work.

General: Material for this package provided by NNRO. Bid package J includes only labor and incidental materials to install the following interior trim:

NNRO to provide the following materials for bid package J:

Cabinetry and tops, interior trim, interior doors, interior locksets, and all other interior trim elements described in bid package J except attic scuttles.

This package includes all window and door trim; stair skirt for all stairways including the basement; interior doors; oak stair treads at all first to second floor stairs; handrails at all interior stairs per plans; attic access door unit; address numbers; mailbox; grab bars;

5/4" oak wall cap at stairway half-walls where occurs; shelves & rods, door hardware; ADA hardware and grab bars; insulated attic access per spec.; cabinetry and tops; surface mounted medicine cabinets; towel bars and hooks, toilet paper hangers.

Provide and install USPS address #'s and mail-box at each house. Refer to division 10.

Delivery of interior finish materials will be coordinated with NNRO and the bid package J contractor. Inspecting and accepting the materials, unloading of truck, and staging/storing materials into each house is the responsibility of the package J contractor.

Incidental materials to be provided under bid package J are items such as fasteners, shims, adhesives, and sealants.

Package K – Floor Finishes

General – Bid package K generally includes work described in division 0, 1, and 9. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Schedule: Begin floor finish installation work after package J (interior trim) and I (interior painting) are complete.

All carpet/pad and vinyl flooring must meet Carpet and Rug institute's Green Label certification.

This bid package includes all underlayment, finish flooring, thresholds, and misc. accessories to provide the following:

Carpet & pad

Vinyl & underlayment

Not included in this bid package are:

Interior stairs to second floor (riser and tread to contrast) are provided in bid package J.

Basement stairs are provided in package A (framing) and J (skirt trim & handrail).

Package L – Landscaping

General – Bid package L generally includes work described in division 0, 1, and 2. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Site grading will be established in 3 stages in the following bid packages:

Rough grade with sub-soils including removing excess soil from lot – Package A

Finish grade incl. spreading any banked topsoil – Package A

Final landscape grade including 12 cu/yds topsoil & 4 cu/yd mulch per lot – Package L

Package M – Gutters and Downspouts

General – Bid package M generally includes work described in specification division 0, 1, and 7. Other elements of the work included in this bid package are noted by reference or description in this section and the bid package description general notes.

Schedule:

Begin gutter and downspout installation after completion of bid package C.

Gutters and downspouts on house/porch

No gutters or downspouts are specified on detached garages.

Gutters to be continuous aluminum k-profile residential gutters. Matching downspouts secured to corner trim. Color: per exterior finish schedule.

Splash blocks at all downspout terminations.

Package N – Garage Overhead doors and operators

Package O – Final Cleaning

General – Bid package O generally includes wet cleaning habitable areas of each house interior, including all plumbing fixtures, cabinetry interiors & tops, and shelves. Vacuum all carpeted areas. Clean all mirrors. Clean windows. Basements to be shop vacuumed.

Assume that large construction debris will be removed (some smaller debris may remain) and that the structure will be broom cleaned prior to start of package O work.

Schedule:

To be coordinated with NNRO.