

Subcontract #: _

Invoicing, Payment, & Release

PLEASE FORWARD TO YOUR ACCOUNTING DEPARTMENT

SEND ALL INVOICES TO:

- **Email** all invoices to subinvoices@mckinstry.com no later than the 15th of each month in order for invoice amounts to be included in McKinstry's payment request to our Client.
- If you do not have scanning capabilities, please mail to:
McKinstry
Attn: Accounts Payable
P.O. Box 24567
Seattle, WA 98124-0567

INVOICES MUST INCLUDE:

1. An invoice number
2. An invoice date
3. McKinstry Subcontract number

ALL INVOICES MUST BE ACCOMPANIED BY:

1. Pay Request – See attached form.
2. Lien Release – See attached form.

Failure to send all three documents may result in a delay of payment.

WE MUST HAVE THE FOLLOWING DOCUMENTS ON FILE PRIOR TO PAYMENT:

1. A signed Subcontract
2. Proof of proper insurance

RETENTION:

If your Subcontract designates a withholding of retention, please ensure that you include that retention withholding on every invoice submitted. When you have completed all work, you must submit the included Retention Release form to your McKinstry Point of Contact per project in order for retention to be released.

Invoices submitted 120 days or more after completion of work will not be processed for payment.

Subcontract #: _

Subcontractor
Pay Request

From: _____

Submit To:
subinvoices@mckinstry.com

Pay Request No: _____
Invoice No: _____
Date: _____
Project Name: _____
Subcontract #: _____

Period: From _____ To _____

	Amount	Complete to Date %	\$
Original Subcontract Amount:			
Change Orders Issued To Date Thru Change Order _____:			
New Change Orders (list separately):			
Change Order _____			
Change Order _____			
Change Order _____			
Change Order _____			
Subcontract To Date:			
Less Work Previously Invoiced:			

TOTALS THIS REQUEST

Gross Amount Due This Request:

Net Amount Due This Request:

Subcontract #:

Release

Subcontractor Name

Subcontract Number

Subcontractor Address

Project Name

Subcontractor Contact Name

Project Address

Subcontractor Contact Phone Number

McKinstry Contact

CONDITIONAL RELEASE

Subcontractor should execute this release if it has not yet received the payment(s) specified below.

Subcontractor does hereby acknowledge that upon receipt by Subcontractor of payment(s) from McKinstry

- in the sum of \$ _____, and/or
- per the attached schedule of values

and if payment is by check when the check has been properly endorsed and has been paid by the bank upon which it was drawn, this document shall become effective to release any and all claims, rights of lien, and Miller Act claims which Subcontractor and its vendors, suppliers and sub-subcontractors have on the project to which the payment relates, including for labor, services, materials, and equipment, through the date that this release is signed. Subcontractor agrees that by accepting and in consideration for the above sum, Subcontractor will defend and hold McKinstry and Client harmless from any claims for payment from Subcontractor's vendors, suppliers and sub-subcontractors and that the duty to defend shall include reimbursement for all costs and attorney fees incurred by counsel selected by McKinstry in connection with such defense. Before any recipient of this document relies on it, the party should verify evidence of payment to the undersigned.

I CERTIFY, REPRESENT AND WARRANT THAT I HAVE THE AUTHORITY TO BIND SUBCONTRACTOR TO THIS RELEASE.

I CERTIFY UNDER PENALTY OF PERJURY THAT THE ABOVE ARE TRUE AND CORRECT STATEMENTS.

For Subcontractor:

Signature

Printed Name

Title

Date

UNCONDITIONAL RELEASE

Subcontractor should execute this release if it has received the payment(s) specified below.

Subcontractor does hereby acknowledge that Subcontractor has received payment(s) from McKinstry

- in the sum of \$ _____, and/or
- per the attached schedule of values

Subcontractor does hereby release any and all claims, rights of lien, and Miller Act claims which Subcontractor and its vendors, suppliers and sub-subcontractors have on the above project to which the payment relates, including for labor, services, materials, and equipment, through the date that this release is signed. Subcontractor agrees that by accepting and in consideration for the above sum, Subcontractor will defend and hold McKinstry and Client harmless from any claims for payment from Subcontractor's vendors, suppliers and sub-subcontractors and that the duty to defend shall include reimbursement for all costs and attorney fees incurred by counsel selected by McKinstry in connection with such defense.

I CERTIFY, REPRESENT AND WARRANT THAT I HAVE THE AUTHORITY TO BIND SUBCONTRACTOR TO THIS RELEASE.

I CERTIFY UNDER PENALTY OF PERJURY THAT THE ABOVE ARE TRUE AND CORRECT STATEMENTS.

For Subcontractor:

Signature

Printed Name

Title

Date

Subcontract #: _

RETENTION RELEASE

Retention will not be released until your McKinstry Project Manager receives this form completed

Subcontractor Information:

Subcontractor Name

Subcontractor Address

Subcontractor City, State, Zip Code

Subcontract Number (located on your subcontract and/or subcontract change order)

SAMPLE

Subcontract #: _

Equal Employment Opportunity

Subcontractor will comply with all legal requirements related to equal employment opportunity and non-segregated facilities, including compliance with Executive Order No. 11246, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities act, Public Law 101 – 336, as amended, Executive Order 13201, and all other applicable federal, state, and local laws and regulations.

During the performance of this Subcontract, the Subcontractor agrees as follows:

1. The Subcontractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Subcontractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Subcontractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
2. The Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.
3. The Subcontractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Subcontractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Subcontractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Subcontractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the Subcontractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Subcontractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Subcontractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Subcontractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Subcontractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Subcontractor may request the United States to enter into such litigation to protect the interests of the United States.

Compliance with 41 CFR 60-300.5(a). Subcontractor shall abide by the requirements of 41 CFR 60-300.5(a). This regulation prohibits discrimination against qualified protected veterans, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans.

Subcontract #: _

Bonds

1. Performance Bond

Subcontractor shall obtain a performance bond in an amount equal to the Subcontract Price ("Price"). If the Price increases as a result of change orders or other modifications to the Subcontract, Subcontractor shall obtain a revised or new performance bond in an amount equal to the new Price.

2. Payment Bond

Subcontractor shall obtain a payment bond in an amount equal to the Subcontract ("Price"). If the Price increases as a result of change orders or other modifications to the Subcontract, Subcontractor shall obtain a revised or new payment bond in an amount equal to the new Price.

3. Surety

McKinstry reserves the right to approve or reject a surety selected by Subcontractor in connection with the above referenced bonds.

4. Documentation

Subcontractor shall promptly furnish an original of the above referenced bonds to McKinstry.

SAMPLE

Subcontract #: _

Prevailing Wage & Certified Payroll

1. Prevailing Wage and Certified Payroll

Prevailing Wage Requirements: Subcontractor must comply with all Federal, State, City, and/or any other local specific prevailing wage reporting requirements as stated in this Subcontract and in the applicable Prime Contract. Subcontractor must comply with all requests from McKinstry related to compliance of these requirements. Subcontractor must pay the prevailing wage rate to all workers, laborers, or mechanics employed in the performance of any part of the work in accordance with the Prevailing Wage Law for the project location. It is the Subcontractor's responsibility to verify the applicable prevailing wage rate(s) and to obtain and complete all required forms and submit to the proper agencies.

2. Certified Payroll Reports

Certified Payroll reports are to be generated weekly in consecutive order and submitted to McKinstry at PublicWorks@McKinstry.com no later than ten business days after the applicable pay period. For the weeks when Subcontractor personnel are not on site, certified payroll reports are still required to be submitted and noted "NO WORK PERFORMED" on the report for that week. Upon Completion of the Subcontractor's work on site the last certified payroll report must be noted "FINAL".

3. Payments

McKinstry, in its sole discretion, may withhold payment to Subcontractor, in whole or in part, if Subcontractor is not in compliance with any prevailing wage or certified payroll requirements.

SAMPLE

Subcontract #: _

Safety

1. General

Subcontractor is responsible for the safety of its own personnel, and the safety of all persons who may be at risk as a result of Subcontractor's work. In case of conflict between any contract requirements, laws, rules, regulations, policies, practices, standards or related obligations, the most stringent will apply. The cost to correct any safety issues caused by Subcontractor's failure to comply with this subcontract will be borne by Subcontractor. Any violation of the provisions of the numbered paragraphs within this safety exhibit could result in the permanent banning of Subcontractor personnel from the jobsite and/or termination of Subcontract.

2. Definitions

Job Hazard Analysis (JHA): An analysis of a work task to identify the sequence of basic steps, potential hazard(s) involved with each step and recommended corrective action necessary to mitigate the hazard.

Site Specific Safety Plan (SSSP): Subcontractor's overall project safety plan that identifies the requirements and process for execution of work in accordance with McKinstry's Safety Program requirements.

Point of Contact (POC): Person(s) authorized to supervise and make decisions on behalf of McKinstry in the course of managing the Project.

Pre-task Plan (PTP): Daily planning tool used to identify potential hazards of the work task and then describe the method to mitigate the hazards.

3. Safety Requirements

1. At a minimum of two weeks prior to the start of Subcontractor's work, Subcontractor will provide a written SSSP and JHA in McKinstry's format associated with its specific scopes of work. Subcontractor may use its own SSSP or JHA only after receiving written approval from the McKinstry regional safety director.
2. SSSP must include a Fall Protection Work Plan.
3. Subcontractor will attend a pre-construction meeting with the McKinstry project team for review and approval of SSSP. Any McKinstry requested modifications shall be made prior to commencement of the work.
4. Subcontractor is required to either attend McKinstry's weekly safety meeting, or hold its own weekly safety meeting to discuss safety topics relevant to the work occurring during the term of the subcontract. Records of attendance must be kept on site and provided to McKinstry upon request.
5. All Subcontractor personnel are required to attend a McKinstry jobsite specific orientation prior to commencement of any work.
6. All Subcontractor personnel are required to complete daily McKinstry PTPs prior to starting work tasks or anytime work conditions change. PTPs shall be kept on site and provided to McKinstry upon request.
7. Subcontractor shall provide and execute all work to comply with OSHA, state and local regulatory agencies and McKinstry's client safety requirements.
8. Subcontractor shall designate a competent Site Safety Representative who is directly responsible for implementation and maintenance of the SSSP, filing all safety meeting attendance rosters and PTPs on site, and monitoring all Subcontractor field activities. Name and contact information must be provided in the subcontractor's SSSP. McKinstry reserves the right to require additional safety training for the designated safety representative. McKinstry reserves the right to require Subcontractor to replace its Site Safety Representative if McKinstry determines the individual is not qualified, is ineffective, or is not fulfilling all applicable safety responsibilities.
9. Subcontractor shall provide and enforce the use at all times of the personal protective equipment (PPE) for its employees, staff or other related personnel as specified by OSHA, Federal Register Title 29, 1926/1910, state regulatory agencies, the McKinstry Safety Program, and the SSSP. Failure to wear required PPE could result in removal from the jobsite.
10. Subcontractor shall inspect tools and equipment as required by OSHA, state and local regulatory agencies, the McKinstry Safety Manual, and the SSSP.
11. Subcontractor shall ensure that all workers on site have the required safety training/certification to perform specific work tasks and/or operate equipment in compliance with OSHA and all state and local regulatory agencies, the McKinstry Safety Program, and the SSSP. Training/certification required may include, but is not limited to: operation of powered industrial equipment (forklift, scissor /boom lifts), confined space entry, work tasks involving respirator protection, trenching and excavation, and rigging and signaling. McKinstry may, at any time, request copies of certification and/or training records to ensure compliance. Subcontractor's failure to have adequately trained personnel will result in the worker(s) being unable to continue performing the work task or operate the equipment.

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12. Any workplace incidents, including unsafe conditions, practices, violations of job safety, injuries, and near misses, must be reported to the McKinstry Safety Incident Hotline (1-866-722-3108) within two hours and notify the McKinstry project safety representative. Safety Incident Reports (SIRs) shall be submitted in accordance with the McKinstry Safety Program. McKinstry reserves the right to investigate any workplace incidents.

13. Subcontractor will correct all unsafe conditions when discovered. The Subcontractor will stop any work deemed unsafe until corrective measures have been made to McKinstry's satisfaction. Subcontractor is not entitled to any damages for subcontractor safety related stoppages and will indemnify McKinstry for costs, losses, or damages incurred by McKinstry for such stoppages. If Subcontractor neglects to take corrective measures, McKinstry will do so at the expense of the Subcontractor and deduct the cost from any payments due to the Subcontractor. Subcontractor must develop and submit a written Corrective Action Plan (CAP) to McKinstry within 24-hours of a safety work stoppage.

14. Subcontractor shall complete and file Safety Data Sheets (SDS) for all hazardous materials brought onto the jobsite. Subcontractor is responsible for conducting all required hazardous material training and provide all required PPE. SDS must be on site at the time of arrival for all hazardous materials.

15. Subcontractor shall ensure all equipment, tools, materials and other apparatuses are stored, stacked, placed, temporarily spotted or set up in such a manner as to maintain safe ingress/egress and a clean and orderly work place. Housekeeping shall include the removal of all debris and trash daily. McKinstry has the right to direct Subcontractor to take corrective action immediately to address any ingress/egress or housekeeping issues.

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Subcontract #: _

Special Terms and Conditions Construction

Unless otherwise specified elsewhere in this Subcontract:

1. Documents

The documents referenced in this Subcontract represent materials, products and equipment that establish a standard of required function, dimension, appearance and quality. Deviations of any kind from the documents shall require written acceptance from McKinstry. Subcontractor shall check all documents upon their receipt and immediately notify McKinstry of any discrepancies. Subcontractor shall compare all documents, including drawings, and verify figures and requirements before laying out the work and will be responsible for any errors, changes, additions or discrepancies, which might have been avoided thereby.

2. Schedule

It is Subcontractor's responsibility to allocate the necessary manpower, material and equipment to meet the schedule, which is part of the Subcontract. All detailed construction activities are to be coordinated with McKinstry's project manager. The schedule is subject to change from time to time at McKinstry's sole discretion. After receipt of communication from McKinstry of any major schedule change, Subcontractor shall have five (5) days to provide feedback to McKinstry, and McKinstry shall use good faith efforts to consider Subcontractor's feedback in scheduling. If McKinstry determines Subcontractor may not meet the schedule, then McKinstry may require Subcontractor to provide a manpower recovery schedule that clearly demonstrates how Subcontractor will meet the schedule. If McKinstry reasonably determines that Subcontractor will not meet the schedule without a change in its approach, McKinstry may require Subcontractor to take specific steps to meet the schedule, including increasing its labor force, the number of shifts, amount of overtime work, days of work including weekends, holidays, and the amount of construction plant and equipment, all without increase in Subcontract Price, and McKinstry may backcharge Subcontractor for associated costs and expenses incurred by McKinstry that are directly related to the foregoing.

3. Submittals

- a) Subcontractor shall submit, as applicable and as directed by McKinstry project manager, the following: physical shop drawings, physical copies of catalog data, brochures, material schedules, and all other documentation; electronic copies of all of the above
- b) Subcontractor shall accompany all submittals with a letter of transmittal.
- c) Any proposed modification to the specifications set forth in this Subcontract must be specifically described in a substitution request and must be conspicuously called out on the shop drawings, product data, etc.
- d) McKinstry acceptance of submittals shall not relieve the Subcontractor from full compliance with the requirements of this Subcontract, including corrections of errors, omissions, and aspects of the submittals, and aspects of the constructed Work, that are not in compliance with this Subcontract.
- e) If a specific material that is to be incorporated into the Work is not identified in the Subcontract, contact McKinstry for clarification.
- f) If McKinstry requires reasonable corrections to any submittals, Subcontractor shall promptly correct and resubmit any and all submittal information.

4. Progress Payments

- a) Subcontractor must submit progress payment requests and invoices to McKinstry no later than the 15th day of each month in order for the invoice amounts to be incorporated into McKinstry's application for payment to the Customer the following month.
- b) Submissions must be made in as prescribed in this Subcontract, including submission of all required documentation
- c) The Subcontract number must be referenced on all pay requests and invoices.
- d) Subcontractor shall provide McKinstry a list of all material suppliers and lower tier subcontractors with the value of the material supplied or work performed on the project.
- e) By submitting a pay request Subcontractor certifies that no lien rights exist, whether a lien release is submitted or not.

5. Background Checks

Subcontractor shall provide evidence that every person performing any part of the Work has passed all required background checks. Subcontractor will bear the costs of all such background checks.

6. Supervision and Employees

Subcontractor shall have a competent superintendent or foreman on the job at all times supervising the Work, who has authority to act on behalf of Subcontractor. Subcontractor agrees to remove from the job any employee(s) who are deemed unsatisfactory to Customer or McKinstry. No lower tier subcontractors will be allowed on site without prior written approval from McKinstry.

7. Work Hours

If not specified elsewhere in the Subcontract or Prime Contract, normal work hours will be Monday through Friday between 7:00 AM and 4:00 PM or as communicated or required by the McKinstry project manager. No work shall be performed on weekends, holidays, or weekdays before 7:00 AM or after 4:00 PM without specific approval from the McKinstry project manager. Aspects of the Work may

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require shift work beyond the hours listed above. If shift work may be required, then the Subcontract Price includes the cost of such shift work.

8. Smoking and Tobacco

Smoking and tobacco are prohibited on the project site.

9. Permits

Subcontractor is responsible to obtain and post at the jobsite all necessary and applicable permits and regulatory notices.

10. Sequencing, Barricading, Traffic Control

Sequencing and barricading of work shall provide for the complete safety of the public and all construction personnel, and shall create a minimum of interference with the normal flow of pedestrians and vehicles either on or off the site. This shall include, but not limited to, flagmen and/or traffic plates across trenches to provide uninterrupted traffic flow. Subcontractor's proposed method of sequencing, barricading and traffic control shall be submitted to McKinstry prior to performing the Work.

11. Temporary Services

Unless otherwise specified, Subcontractor shall furnish and pay for all temporary services as may be required in connection with the Work. Subcontractor shall operate and maintain such services in a condition satisfactory to McKinstry and Customer and adhere to all regulatory requirements. Subcontractor is responsible for the following services, except to the extent voluntarily provided by McKinstry or required to be provided by McKinstry:

- a) Storage for materials, tools and equipment.
- b) Parking for vehicles
- c) Office trailer
- d) Communication, telephone, and facsimile services
- e) Potable water
- f) Sanitary and bathroom facilities
- g) Temporary power
- h) Trash dumpsters
- i) Transportation of personnel
- j) Secured hazardous waste storage

All temporary services shall be removed in a manner satisfactory to McKinstry and Customer by the Subcontractor at no cost to McKinstry or Customer upon completion of the Work.

A source of temporary electric power (120V) and lighting may be provided by McKinstry or Customer for use by Subcontractor, at the discretion of McKinstry and Customer. Use of power is at Subcontractor's sole risk. McKinstry and Customer are not responsible for the condition, adequacy, or reliability of power. Except to the extent provided by McKinstry, Subcontractor shall provide its own connections, task lighting and temporary wiring from the power source. Power and connections for equipment that exceeds the reasonable capacity of sources provided by McKinstry or Customer, such as welders, will be Subcontractor's responsibility. Subcontractor shall provide any additional electrical devices, equipment and conductors, including GFIs, necessary to perform the Work safely and in compliance with all laws and regulations.

12. Parking and Storage

The parking of equipment, storage of materials, parking of construction personnel vehicles, and use of any pertinent facilities at the project site shall be under the sole direction and supervision of McKinstry and the expense of the Subcontractor. Subcontractor will be responsible for any theft or damage caused to materials stored on site. Regardless of any payment, the risk of loss of such materials and equipment, including partially completed Work, shall remain upon Subcontractor until final acceptance of the Work by Customer.

13. On Site Deliveries

Subcontractor shall make final coordination of material deliveries to the site with McKinstry's project manager a minimum of two (2) business days in advance. Subcontractor shall have a qualified representative and necessary equipment present to accept and unload all deliveries. Subcontractor shall be responsible for inventory, verification, reconciliation, and timely inspection for damage for all delivered equipment and material related to the Work.

14. Items Provided by McKinstry or Customer

If the Work involves incorporation of any item, including but not limited to supplies, materials, equipment, components, or intangible property, provided by McKinstry or Customer, all of Subcontractor's obligations under this Subcontract apply to such item, and shall commence on delivery of such item to the project site, unless the Scope of Work explicitly specifies differently.

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15. Coordination

Subcontractor shall be responsible for coordination with all other trades and owner furnished items to insure proper interface between all systems. A contact list of all subcontractors can be obtained from McKinstry's project manager.

16. Systems Installation

Provide all fasteners, hardware and miscellaneous accessories necessary for a complete installation of the applicable building system(s) according to the more stringent of contract documents, manufacturer's instructions or building codes unless explicitly identified elsewhere in this Subcontract.

17. Layout

Subcontractor shall layout its work and be responsible for the accuracy thereof. Subcontractor shall coordinate its layout with the layout of other trades.

18. Core Drilling and Saw Cutting

Subcontractor shall perform or otherwise be responsible for all core drilling, saw cutting, sleeving, cutting, patching and fire-stopping which may be required in connection with the Work. Prior to any such activities, layout must be completed by all applicable trades and the McKinstry project manager must view the current condition of the area of such activities.

19. Protection of Work and Property

Subcontractors shall continuously maintain adequate protection of its work from damage that may be caused by others. Subcontractor shall protect its work area from damage caused by the elements including rain, wind, snow, erosion. Subcontractor shall protect Customer property from damage arising in connection with this Subcontract. Subcontractor shall immediately notify the McKinstry project manager of any damages to Customer property, including pre-existing damages, regardless how the damages are caused. Subcontractor is responsible for all damage it causes, including to any non-Subcontractor property, and Subcontractor will promptly repair such damage at its sole cost.

20. Safety

Subcontractor is responsible for compliance with all safety requirements, and for the ultimate safety of its employees, lower tier subcontractors, agents, and others under its direction or control and will implement and follow all best practices designed to ensure the safety of all people on and around Subcontractor's work area.

21. Hazardous Materials

Subcontractor certifies that the Work may involve known or unknown exposure to hazardous materials, pollutants, and mold, including asbestos and lead ("Hazardous Materials"). Subcontractor's employees, lower tier subcontractors, and agents, shall be trained in the recognition, risks, and safeguards associated with work that may disturb and/or expose any person or property to Hazardous Materials prior to performing any work, and Subcontractor shall implement best practices to eliminate all dangers to persons and property associated with Hazardous Materials related to the work. Subcontractor shall consult with Hazardous Materials experts if reasonably necessary for Subcontractor to comply with the foregoing obligations. Subcontractor is solely responsible for damages and injuries that may arise out of Subcontractor's work associated with Hazardous Materials. If McKinstry has received any assessments related to Hazardous Materials from Customer, then such assessments are available for review and inspection by Subcontractor, but McKinstry shall in no way be responsible for the accuracy, completeness, or reliability of such assessments, and Subcontractor relies on such assessments at its sole risk.

22. Clean Up

On at least a daily basis, Subcontractor shall clean and organize its work area to the satisfaction of the McKinstry project manager. Subcontractor is responsible for disposal of and disposal fees for its own waste. If Subcontractor fails to comply with the foregoing, McKinstry may backcharge Subcontractor for all costs incurred by McKinstry in cleaning and organizing Subcontractor's work area.

23. Remedial Work

Cutting, patching, repairing and any other remedial work that becomes necessary as a result of Subcontractor's work shall be either performed by or paid for by the Subcontractor whose scope of work necessitated such repairs. If McKinstry determines the remedial work is not performed in a timely fashion and/or adequately, it shall be repaired by McKinstry at Subcontractor's expense.

24. Reports

Reports in the form and timing proscribed in this Subcontract or required by the McKinstry project manager must be turned in to McKinstry's project manager at the end of each reporting period.

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25. Closeout

At closeout, Subcontractor shall as directed by McKinstry provide information to McKinstry that includes but is not limited to all operations and maintenance instructions and manuals, warranty letters and certificates and information, additional stock, proof of permit sign-offs, proof of compliance with prevailing wage and certified payroll requirements as applicable, three (3) physical copies of as-built drawings for all phases of Work, and one (1) electronic copy of as built drawings for all phases of the Work.

SAMPLE

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Special Terms and Conditions Lighting

Subcontractor is a lighting provider. The following defines and describes some of the performance levels Subcontractor is required to comply with, but the following is not all inclusive. Unless otherwise specified elsewhere in this Subcontract:

1. Scope and Sequence Clarifications

- a) All provider questions, comments, clarifications or concerns must be communicated without hesitation. Email is the preferred means of recordable communication. Unless otherwise directed, emails will carbon copy the appointed McKinstry project/construction manager, McKinstry mechanical or electrical designer and McKinstry's commissioning lead(s).
- b) Dissemination of project specific information to other trades without McKinstry's consent should be avoided.

2. Schedule

- a) All work is to be performed in conjunction with applicable construction schedules. Completion of lighting must also be accomplished with sufficient time remaining for McKinstry commissioning to complete the verification process before the end date of the project.
- b) Provider adherence to the performance standards outlined in this document will result in an efficient and timely final validation of the lighting system. Any deviation from this performance standard must be communicated to McKinstry immediately for impacts on cost and schedule.

3. Communication

- a) McKinstry requires providers to adhere to an appropriate level of communication as determined by the specific project. This includes but is not limited to:
 - i) Promptly returning phone calls and e-mails.
 - ii) Timely response to or delivery of RFI's, punch lists, and observation logs.
 - iii) Attend and participate in any required coordination / start-up meetings.
 - iv) Acknowledgment of aforementioned communications shall be made by the provider within one business day of initial notification and shall include a resolution or planned date of resolution.

4. Manpower and Support

- a) The provider is responsible for providing adequate, qualified manpower for the purpose of providing a complete installation within the constraints of the project schedule.
- b) Support is defined as providing experienced personnel for the task at hand. For example, during functional performance testing, the support person provided by the provider shall be a capable engineer or designer, familiar with the system being tested and shall be present alongside the test crew to make necessary changes needed to correct deficiencies found during the testing process.
- c) At a minimum the provider shall anticipate supporting all peripheral functions including but not limited to:
 - i) Installation verification and start-up (including sensor calibration)
 - ii) McKinstry point to point, functional performance, and integrated system testing
 - iii) Punchlist, observation log, and deficiency resolution
 - iv) Customer training, etc.
- d) If the provider is unable to supply experienced support personnel McKinstry will evaluate the schedule cost impacts subject to reimbursement from the provider. McKinstry reserves the right to have the provider remove and replace incompetent or ineffective personnel.

5. Installation Verification and Start Up

- a) At a minimum the following will be verified:
 - i) Installed (permanent) and operational (control panel and load breaker)

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- ii) Clean
- iii) Lamps burned in (12 hours minimum)
- iv) Proper zoning
- v) Proper sensor orientation (limit false activation)
- vi) Labeling

b) Clearly document installation verification and start-up and checkout results according to manufacturer's written instructions.

c) Submit compiled electronic copies of installation verification and start-up and checkout results and certifies that installation verification and start up and checkout procedures have been completed according to the contract documents and product manufacturer's instructions.

6. Point-to-Point / Function Testing

a) A documented, comprehensive point to point and basic function testing in the field is required on all installations. Factory calibration and bench tests are not acceptable alternates to on site field-testing.

b) Point-to-point (or calibration verification) scope of work consists of testing from all end field sensors (any sensor that provides an input signal to, or receives an output signal from the control hardware) through proper input/output to the operator interface. Testing must be complete, detailed and documented on approved point to point verification forms. Point-to-point testing forms will include:

- i) Sensor placement and orientation
- ii) Occupancy sensor function, sensitivity and time delays
- iii) Daylight harvesting sensor calibration
- iv) Automated shade operation
- v) Manual control placement and operation
- vi) Automated control operation, including scheduled on / off functions, dimming trims and presets
- vii) Override operations, access and functionality
- viii) Centralized control interfaces and operation

c) Submittal of the provider's forms for approval must take place 3 weeks prior to commencement of field testing. The point-to-point report summary documentation must include the signature of the test technicians and date completed. The technician's signature certifies that the system has been tested and is fully ready for the commissioning lead's performance verification testing.

d) Point-to-point testing and documentation for McKinstry projects will include, but not be limited to, the following criteria:

- i) Field sensor and functionality.
 - (1) Verify all field sensors installed are properly sized or ranged for anticipated operating range. Sensors are adjusted for correct position, orientation and full range.
 - (2) All zone sensors that are installed on perimeter walls, or on any spaces that are at risk of being influenced by conditions other than the space being measured, shall be installed to allow the sensor to properly read the space conditions. Any sensors found to be influenced during commissioning will be corrected or relocated, as necessary at no cost to McKinstry or others.
- ii) Conductor integrity.
 - (1) Test all wiring continuity from field sensors to correct input/output terminals.
- iii) Conductor termination.
 - (1) Verify all sensor wire terminations are per the submittal package
 - (2) Verify all input/output wire terminations are correct

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(3) Verify field sensors communicate to the operator

(4) Label all input wires per the project specification requirements – if no project-specific labeling requirements have been defined, the following is the minimum labeling standard:

(a) All wires and cables shall be identified with permanent markers or wire tag at each end.

(b) Wire designators at controllers shall describe the sensor termination point and function. The intent is that the wiring tags in the lighting panels clearly describe the sensor/service that each wire provides. Labeling shall be identical to the labeling shown on the As-Built drawings – update each to match each other at project completion.

(c) Wire designators at sensors shall describe the control panel, controller number and terminal numbers that the sensor is wired to.

(d) Label all input and output field sensors as they are labeled or defined on the control diagram installation drawings.

(e) At project completion, update the construction drawings to 'as-built' conditions and after the drawing content/accuracy are approved, provide a laminated print (min. size: 11"x17") of each panel's terminations/systems attached to the inside cover or door of each controller.

(5) Verify that cable labeling is complete at each end of each cable and properly identifies the termination/sensor at the opposite end – include the labeling information on the point-to-point documentation report.

iv) Command to output.

(1) Test linear-scaling calibration of every analog output point. For points that have custom scaling, verify that the value on the graphics page (0-100%, etc.) match the scaling input of the field sensor. Detail these values on the point-to-point checkout documentation.

(v) Sensor Calibration.

(1) Document sensor calibration per the table listed under sensor calibration. Document both the field reading/condition and the value represented on the graphical interface.

7. Sequence of Operation Verification

a) Comprehensive sequence of operation verification is required on every installation or modification to a lighting system by the provider.

b) Test and documents shall include all logic and control sequence statements for accomplishing each specific control function as detailed in the approved sequence of operation.

c) Submittal of the provider's forms for approval must take place 3 weeks prior to commencement of field testing. The verification documentation must include the signature of the test technicians and date completed. The technician's signature certifies that the system has been tested and is fully ready for the commissioning agent's performance verification testing.

8. Sensor Calibration

a) All devices are to be field verified for calibration. Verification must be done at or close to normal operating conditions.

b) Unless otherwise specified, calibrate per the following criteria:

Fixture/Sensor Application	Accepted Tolerance (+/-)
Foot-candle reading (night)	±20% design illuminance
Foot-candle reading (day, blinds open)	<20% design illuminance
Foot-candle reading (day, blinds 1/2 open)	<20% design illuminance

Note: Accepted calibration tolerances will vary according to measured medium and application of sensors. The Tolerances listed are standard accepted criteria.

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9. Test Instrumentation

- a) All field calibration must be done with high quality instrumentation. Test instrumentation selected for calibrating field devices shall be suitable for application.
- b) Instruments need to display a current (within 12-month) calibration sticker. Calibration facility shall use NIST-traceable reference instruments in their calibration process.
- c) Associated instrument calibration certificates need to be available within 24 hours of request for copy.

10. Punch List / Deficiency Resolution

- a) If deficiencies are discovered and deemed the responsibility of the provider, McKinstry will notify the provider.
- b) Within one business day of deficiency notification, the provider must resolve or provide the earliest possible time and date the deficiency can and will be resolved.
- c) McKinstry's commissioning team will begin system point verification after the provider's point-to-point testing and documentation is completed and provided to McKinstry. Deficiencies discovered during McKinstry's commissioning process that results in the need for McKinstry to retest, are subject to cost impacts.
- d) McKinstry's commissioning team will begin system functional performance testing after the provider's sequence of operation verification testing and documentation is completed and provided to McKinstry. Deficiencies discovered during McKinstry's commissioning process that results in the need for McKinstry to retest, are subject to cost impacts.

11. Training

- a) The provider is responsible to provide owner training on their installed system. A training agenda will be approved by McKinstry. Owner facility staff attending training sessions "sign off" on attendance sheets and "sign off" on thoroughness of training sessions. Provider shall supply electronic copies of Training Session attendance sheets and signed Owner Acceptance of Training sheets to McKinstry.
- b) The training must be performed by qualified individuals familiar with the specifics of the project for a sufficient duration to ensure that facility staff has all the information needed to optimally operate, maintain and replace the commissioned features and systems.

12. O&M Manuals

- a) Provider submits electronic copies of O&M Manuals to McKinstry for compiling into a single electronic document. Design Engineer and Commissioning Agent or McKinstry Construction Manager approves test procedures.

13. Deliverables

- a) In addition to the project operation and maintenance manual requirements the provider will be required to provide the following documentation:
 - i) Completed Point-to-Point documentation prior to the commencement of McKinstry's commissioning team back check.
 - ii) Completed sequence of operation verification documents prior to the commencement of McKinstry's commissioning team functional performance testing.
 - iii) System schedule.
 - iv) Hard and electronic copy of the project specific as-built fixture schedule.
 - v) Hard and electronic copy of the as-built reflected ceiling plan showing fixtures.
 - vi) Hard and electronic copy of the as-built sequence of operation.

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**Special Terms and Conditions
Professional Services**

Subcontractor is a professional services provider, which may include architectural, engineering, design, consulting, and other service-related work. The term “Subcontractor” as used in this agreement is to be interpreted consistent with the foregoing sentence. Unless otherwise specified elsewhere in this Subcontract:

1. Deliverables

Subcontractor shall submit to McKinstry the deliverables described in the Scope of Work, including all aspects of the Work not explicitly identified as deliverables in the Scope of Work that are necessary to achieve the objectives of Customer and McKinstry. This includes any architectural and engineering services that are necessary to design the project in accordance with McKinstry’s and the Customer’s requirements, as outlined in the project program and other relevant data defining the project.

To the extent required by law, such deliverables shall be prepared under the direction of and shall bear the seal of an appropriately licensed professional. Subcontractor shall treat such deliverables as confidential, and shall distribute copies of them only to McKinstry and any other party authorized in writing by McKinstry to receive copies, except Subcontractor shall be entitled to distribute them as required by local laws and to provide documents as otherwise required by law. Reports and other documents created by Subcontractor are prepared solely for the use of McKinstry and Customer, and other entities engaged by McKinstry or Customer, and such reports and other documents are not for the benefit of any third party not expressly identified in this Subcontract.

2. Tax Exemption

If Subcontractor claims an exemption for taxes, Subcontractor shall indemnify and hold McKinstry and Customer harmless for all liability, penalty, interest, fine, tax assessment, attorneys' fees, or other expense or cost incurred by McKinstry or Customer as a result of any action taken by McKinstry or Customer in accordance with Subcontractor’s decision.

SAMPLE