

# Post Design and Construction Services

*“Please notify the coordinator of this section of the Professional Services Guide with any comments, concerns, or errors, by email: [Construction Point of Contact](#).”*

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- **Construction Product Line Leader's Comments**

While this guide primarily deals with professional services that occur prior to contract award, it is important to stress the support required by the A&E community during the actual construction/renovation of facilities. First of all, it is important to note that our clients require that we deliver completed facilities in the least amount of time. In many cases, this requirement is met through use of delivery order contracts already in place, which enables us to significantly speed up the award process, but this also includes assuring that the contract time required to complete the scope of work is kept to the bare minimum.

In addition, we must be able to count on the A&E of record to provide timely review of submittals and shop drawings and to expeditiously develop solutions to conflicts/omissions in the plan and specifications, as well as to assist our field offices in developing solutions to unforeseen conditions that arise during construction.

As we all know, virtually all of our construction contracts involve changes during the construction process; and in many cases, these changes involve additional time. With our commitment to our clients to complete facilities in the minimal amount of time, it is imperative that we receive prompt A&E support to have a chance of achieving this goal. In this regard, changes to the contract documents must be initiated and approved by the Contracting Officer in the field office administering the work. We have found that through Partnering appropriate contractor, designer, customer and Government representatives can develop mutual goals and work as a team to ensure that a quality and timely facility is provided within ever tightening budget constraints.

In closing, we must all realize that with shrinking budgets, reduced resources and the commitment to our clients to provide a timely finished product that we have a difficult task. The A&E of record plays a key role in our success and must be prepared to provide timely and quality service after award of a construction contract.

- **Communications**

Direct communications with ROICC office personnel administering the contract is encouraged. If there is a particular question regarding requests for information, contact your Assistant Resident Officer/Engineer in Charge of Construction to avoid potential delays.

- **Pre-construction Design Briefs**

On complex projects, it may be beneficial to the ROICC to provide a pre-construction design brief to the ROICC team and/or customers and contractors. Contact ROICC staff for guidance on this.

- **Consultation During Construction**

- **General**

The A&E shall provide consultation services during the construction period. Such consultation may or may not be reimbursable as follows:

- **Non-Reimbursable Consultation:**

Under paragraph 3(g) of Section 01011, "General Paragraphs", of the A&E Contract, the A&E shall promptly furnish consultation services without additional compensation. Such consultation typically occurs in the form of a Request for Information (RFI) from the Resident Officer In Charge of Construction (ROICC). Typically, RFI's include providing clarification of the intent of the drawings and specifications in response to questions which routinely arise during the course of construction and may result in preparation of amplifying drawings, specifications, amendments, change orders and cost estimates to correct errors, omissions, inconsistencies between drawings and specifications, conflicts in dimensions, lack of detail or poor design quality in the drawings and specifications. Amplifying drawings, specifications, amendments, change orders and cost estimates shall be prepared in accordance with the provisions and standards set forth in this Professional Services Guide. In such cases, the A&E shall work closely with the ROICC to assure that the timing required for preparation of such documents is coordinated to minimize delay to the construction. It is expected that the A&E will provide a response to an RFI not later than 3 working days after notification. Where the response to an RFI requires additional time, the A&E shall notify the ROICC as to the expected date of response.

- **Reimbursable Consultation:**

In addition to non-reimbursable consultation, reimbursable A&E services may be required for specialized consultation with LANTNAVFACENGCOM and ROICC personnel either at the site of construction or in the A&E's office regarding matters of a nature not included under "General Paragraphs" of the A&E Contract. Such consultation may include but is not limited to:

- a. Consultation regarding unforeseen problems or questions during construction.
- b. Consultation on critical items during construction, including, but not limited to:
  1. Assisting the ROICC in final field checkout of basic mechanical and electrical systems.
  2. Witnessing final acceptance tests for HVAC systems.
  3. Witnessing and certifying construction contractor compliance with field test procedures for specialized mechanical, electrical and electronic systems designed for the project. Such services shall be performed by registered professional engineers and include the A&E's certification of compliance by the construction contractor with all specified test procedures, a critique of the data obtained and the stated or implied results of the tests performed.
- c. The preparation of all changes or additions to the drawings or specifications, amendments, change orders and cost estimates resulting from a change in scope, unforeseen conditions, or other modifications. Such drawings, specifications, amendments, change orders and cost estimates shall be prepared in accordance with the provisions and standards set forth in this Professional Services Guide. In

such cases, the A&E shall expedite the preparation of such documents to minimize delay to the construction.

d. Evaluation of construction contractor proposed exceptions or variations to the requirements of the contract documents (beyond the scope of routine shop drawing submittal deviations).

e. Evaluation of construction contractor Value Engineering Change Proposals (VECP).

- **Basis of Payment for Reimbursable Consultation**

Payment for reimbursable consultation services, whether performed in the A&E's office or at the construction site, will be made on a cost per man-hour or cost per man-day (8 hour) basis. The number and cost of reimbursable consultation man-hours or man-days required both at the site and in the A&E's office will be discussed during fee negotiations, and the A&E Contract will stipulate lump sum prices for consultation reflecting these negotiations. These lump sum prices are contingent upon the scale, type and complexity of construction as well as the amount of funds available. It should be noted that although these lump sum contracted prices for consultation reflect the anticipated amount of consultation required, no minimum amount is guaranteed. Payment for consultation services will be made on an "as requested" basis.

To establish the A&E's cost per man-hour and per man-day for office and site consultation services and to facilitate contract modifications for changes to the amount of A&E consultation required, the A&E shall submit with his fee proposal the following unit prices for negotiation:

- a. Labor cost per hour and per day per person (average cost per person (RA or PE), including overhead and profit).
- b. Labor cost per person associated with travel time (round trip) from the A&E office to the site.
- c. Travel cost per day (e.g., car operating costs or car rental) at the site.
- d. Travel cost per trip in addition to above (e.g., plane fare) to the site.
- e. Lodging cost per night per person at the site.
- f. Per diem per day per person (e.g., meals) at the site.

- **Changes to Negotiated/Contracted Reimbursable Consultation**

If, during the course of the A&E contract, the Government wishes to change the number of contracted A&E reimbursable consultation man-days, an adjustment in contract price will be made in accordance with the negotiated unit pricing requested above and a subsequent contract modification will be issued.

- **Requests for Consultation**

Requests for A&E consultation during construction will be initiated by the ROICC. In most cases, the A&E will initially receive such requests by telephone and, depending upon the circumstances, a follow-up letter. In the initial contract, the ROICC and A&E shall establish

the reasons for the consultation request, determine whether the A&E's consultation effort is reimbursable and, if so, an agreed upon price and schedule to perform the consultation services, using the contract unit prices for office and site consultation, will be established. The ROICC will then ensure that a fixed price order is issued for the required services keeping within the lump sum contracted price for this effort.

- **Consultation Reports**

- **General**

At the completion of each site consultation visit but prior to leaving the job site, the A&E shall submit to the ROICC a brief handwritten report of the services rendered and send one copy to the EFD/EFA Project Manager (PM). Within 5 working days following the completion of each office consultation request, the A&E shall submit two copies of a final typed report to the ROICC and one copy to the PM. Each report shall include as a minimum:

- a. A cover letter indicating the A&E and Construction Contracts involved, the telephone conversation or letter requesting the site or office consultation, the order number of the consultation, and the A&E representatives who performed the services along with their titles.
- b. A description of the services rendered.
- c. Persons contacted and those in attendance during the consultation. Include their telephone numbers.
- d. Problems encountered.
- e. Recommended solutions or proposed milestones for resolution.

- **Evaluation of Contractor Proposed Exceptions or Variations to the Contract Documents**

In addition to the general requirements, consultation reports on A&E evaluation of construction contractor proposed deviations or variations to the contract requirements shall address:

- a. Whether the proposed substitution is of equal, better, or of lesser quality than the design requirements.
- b. If of lesser quality, the acceptability of the proposed substitution and the difference in monetary value.
- c. If of equal or better quality, the advantages to the Government in accepting the substitution at no change in contract price or possible added price if applicable.

- **Evaluation of Construction Contractor Value Engineering Change Proposals (VECPs)**

The purpose of a VECP is to achieve savings in cost by modifying the design so as to permit more economical methods and materials of construction and still maintain the operational, functional and aesthetic quality of the facility. Note that a construction contractor VECP differs from a construction contractor proposed variation or

deviation to the contract documents in that a VECP must maintain at least the same level of quality as in the original design while a proposed variation or deviation could lower the quality of the construction product. Under the VECP program, the contractor and Government share in the savings resulting from acceptable proposals while a full credit (deduct) in the construction contract price is taken for approved variations or deviations which are of lesser quality than the original design.

In addition to the general requirements, consultation reports on A&E evaluation of VECP's shall include:

- a. The advantages and disadvantages of the VECP.
- b. Economic analysis and justification for recommending approval or rejection of the VECP.

In order to avoid possible delays to construction, Government processing time for VECP's is generally limited to 21 calendar days from the date the ROICC receives the VECP package from the contractor. Accordingly, the A&E shall complete and forward consultation reports on VECP's to the ROICC and PM within 5 working days from the time of receipt. When the VECP is of significant complexity that the response requires additional time, the A&E shall notify the ROICC as to the expected date of response. In addition, the A&E shall also forward one copy of the VECP consultation report to LANTNAVFACENGCOM Code C147.

## • Design/Build Contracts

### • General

When a design/Build contract is awarded, the ROICC is responsible for managing/administering both the design and construction efforts of that particular project. The A&E needs to understand that after contract award, Administrative Contracting Office (ACO) authority is passed to the ROICC who is responsible for the execution of both the design and construction phases of a Design/Build contract.

Post-award contract administration for Design/Build projects is similar to what takes place on a Design/Bid/Build project. The contractor's designer and/or QC Manager will approve all technical submittals, except those normally approved by LANTDIV C14 or their design agent.

## • Design Field Support

### • General

Unless Supervision and Inspection Services are negotiated and contracted for during the Construction Phase, the A&E has no field construction responsibilities. The ROICC is responsible for field administration and the Government's quality assurance program relative to the construction contractor's quality control program. However, to assist the ROICC in this endeavor, the A&E shall, at the Government's option provide Design Field Support.

Design Field Support consists of periodic site visits by teams of A&E personnel to review and report on particular phases of construction or specific problem areas, assess the progress of construction and assist the ROICC in a variety of quality assurance functions. The purpose of the team visit is to ascertain whether work-in-place satisfactorily meets the intent of the

design documents and serves to keep the A&E aware of the status and quality of the construction product. As a general rule, design field support is required for critical design elements or phases of the construction work.

The number of visits and A&E team composition will be negotiated on a case-by-case basis. Contributing factors include the size and complexity of the project, qualifications of ROICC personnel at the site and location of the project. The request for a site visit and the preferred A&E team composition will be determined by the ROICC. Only the design disciplines directly involved with that particular design element should participate in the site visit. Visits will be coordinated and scheduled by the ROICC to allow the A&E and Government to get maximum benefit from each trip.

- **Partnering**

LANTDIV and its customers are committed to forming a cohesive partnership with the contractor, the customer and the design agent. This partnership strives to draw on the strengths of each organization in an effort to achieve a quality project with first time quality, within budget and on schedule. The A&E is expected to fully participate in the partnering process. The number of partnering sessions and A&E team composition will be negotiated on a case-by-case basis. Contributing factors include the size and complexity of the project, qualifications of ROICC personnel at the site and location of the project. The request for a partnering session and the preferred A&E team composition will be determined by the ROICC. Only the A&E project Manager and possible some of the design disciplines directly involved in the current phase of work should attend the session.

- **A&E Tasks and Responsibilities for Design Field Support**

A&E participants in the construction progress reviews shall be alert to and document the presence of perceived deficiencies in the construction work and shall note potential future coordination problems, which may be avoidable. The construction progress review teams shall not conduct tests of equipment or systems and shall not disturb the work performed by the construction contractor in any manner that might cause the construction contractor to have to perform additional work or rework. The A&E shall provide copies of the construction contract drawings and specifications for team participants to use during the construction progress reviews.

At the conclusion of each team review, which should normally be geared to take no more than six hours, the A&E shall informally advise the ROICC of any observed deficiencies in construction or possible coordination problems. A handwritten report of all observed deficiencies and potential coordination problems shall be prepared at the site immediately following the team review and given to the ROICC. One additional copy of each report shall be forwarded to the PM. The handwritten report shall identify the construction contract, the A&E firm and Government participants on the team review and their specific function. Each observed construction deficiency shall be addressed separately in the report by citing the specific construction contract requirement (specification paragraph or drawing detail) which pertains to the observed deficiency and stating specifically how the observed construction differs from that required in the construction contract documents or from that intended by the designer. The A&E shall recommend corrective measures to be taken in such instances, if applicable. The A&E shall also comment on observed coordination problems such as installation of mechanical work and either structural work or architectural features that may encounter problems due to improper layout or poor usage of available space within a ceiling area or utility corridor. In addition, although the A&E is not responsible contractually for construction safety, potential life safety hazards observed shall be included in the report. The post occupancy inspection report, if contracted for, will include lessons learned in providing a

quality facility that meets the user's expectations as well as identifying warranty related problems, any latent defects observed as well as any potential maintenance problems that may be evident. Navy criteria deficiencies shall also be noted.

- **Shop Drawings/Submittal Review**

At the Government's option, checking of shop drawings/submittals and other data submitted by the construction contractor is an A&E's responsibility. The A&E shall provide and use the shop drawing approval stamp shown in Figure 8.1 to process shop drawing submittals.

NOTE: Shop drawings/submittals shall include all submittal descriptions (SD) as listed in Section 01300, "Submittals" of the construction contract specifications.

Generally, all projects utilize formal quality control procedures. Under these procedures, the contractor's quality control manager approves for construction all shop drawings and submittals except those specifically designated in the project specification for approval by the Contracting Officer.

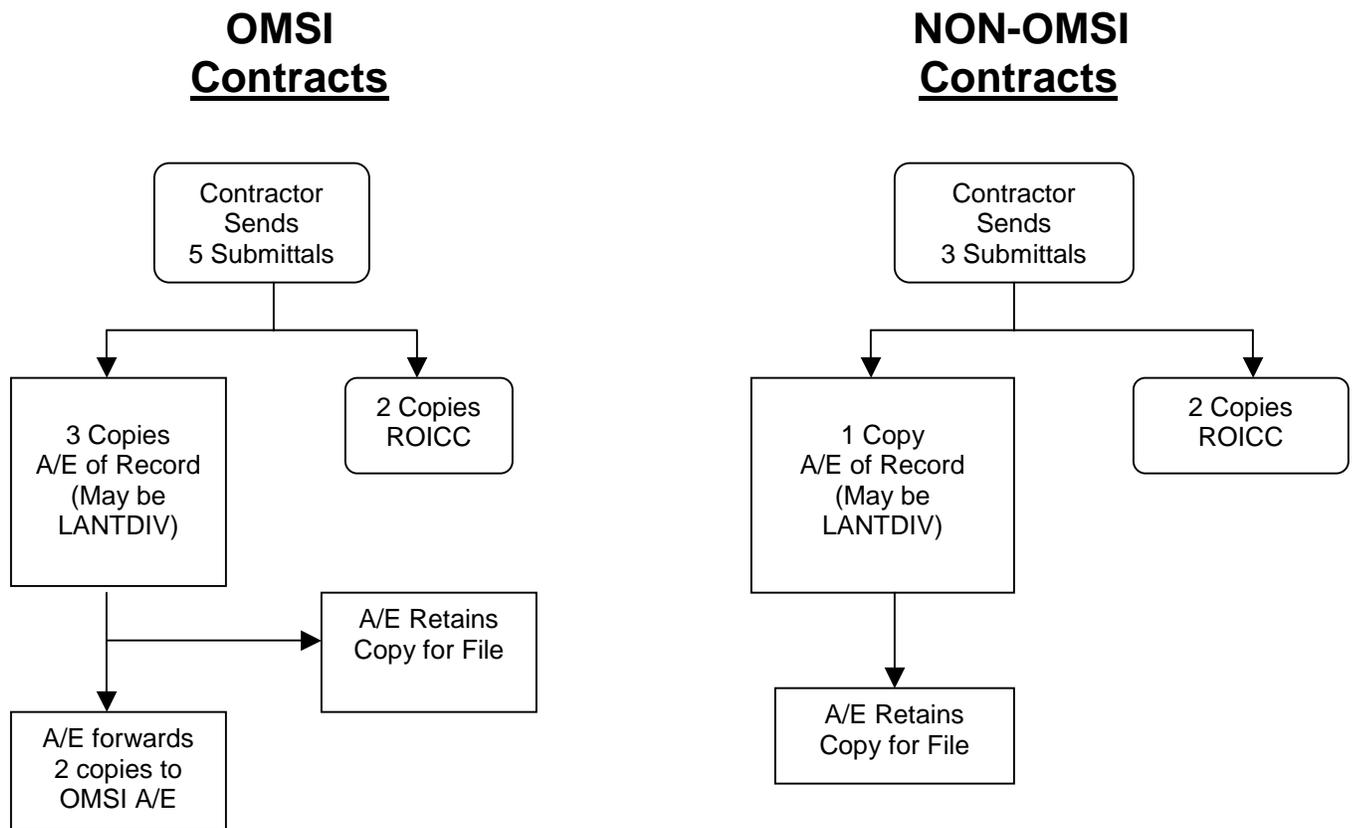
Accurate, timely review of ALL technical submittals requiring Contracting Officer approval, including applicable operation and maintenance data packages but excluding any items that are reserved for LANTNAVFACENGCOM approval, is an A&E's responsibility. The sub-section entitled "Shop Drawing Review Procedures" outlines the procedure for handling submittals on all projects, including both those where the contractor's quality control manager is the approving authority and those where the Government (LANTNAVFACENGCOM or A&E firm) is the approving authority. A copy of submittals approved by the quality control manager will be provided to the A/E for record and filing purposes. No review of contractor approved submittals will be required by the A/E.

- **Stateside and Overseas Contracts**

Submittals shall be submitted and distributed in accordance with the flow charts on the next 12 pages:

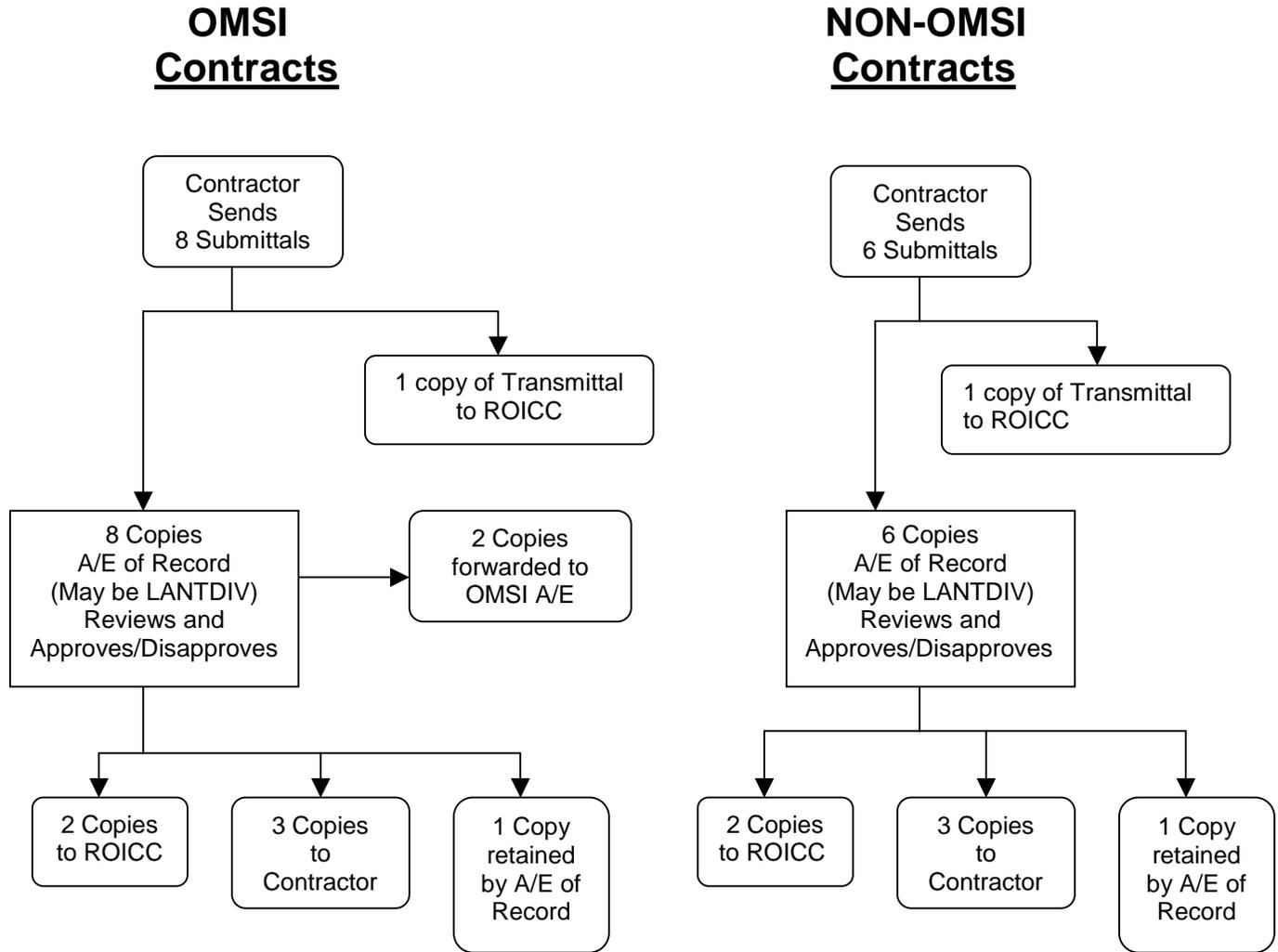
## Stateside Submittal Processes

### A. APPROVAL BY CONTRACTOR



## Stateside Submittal Processes

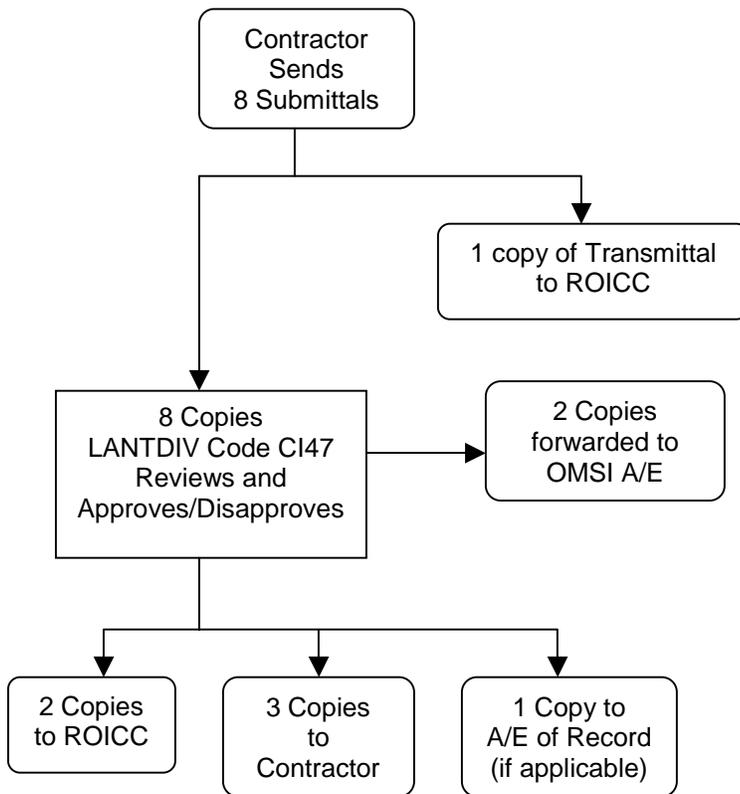
### B. APPROVAL BY DESIGNER (A/E)



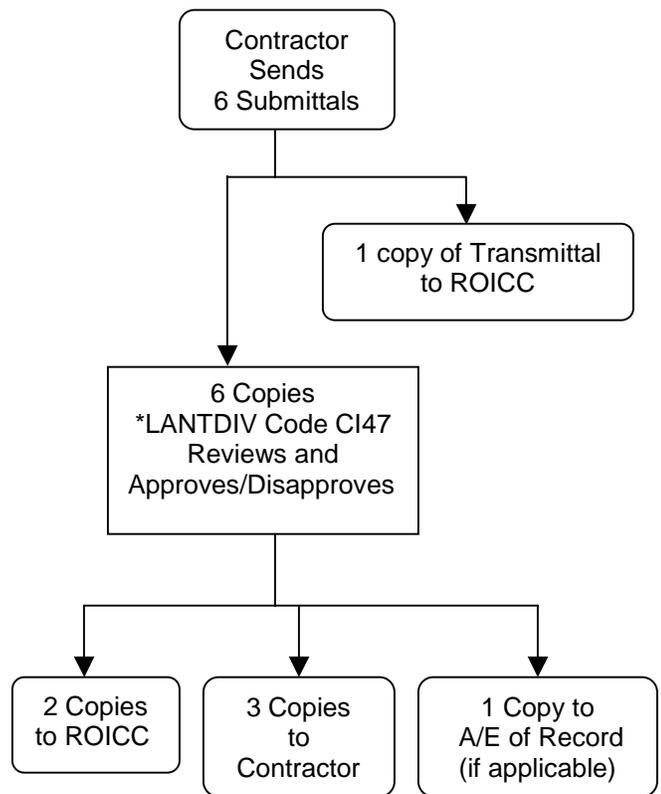
## Stateside Submittal Processes

### C. LANTDIV TECHNICAL APPROVALS

#### OMSI Contracts



#### NON-OMSI Contracts

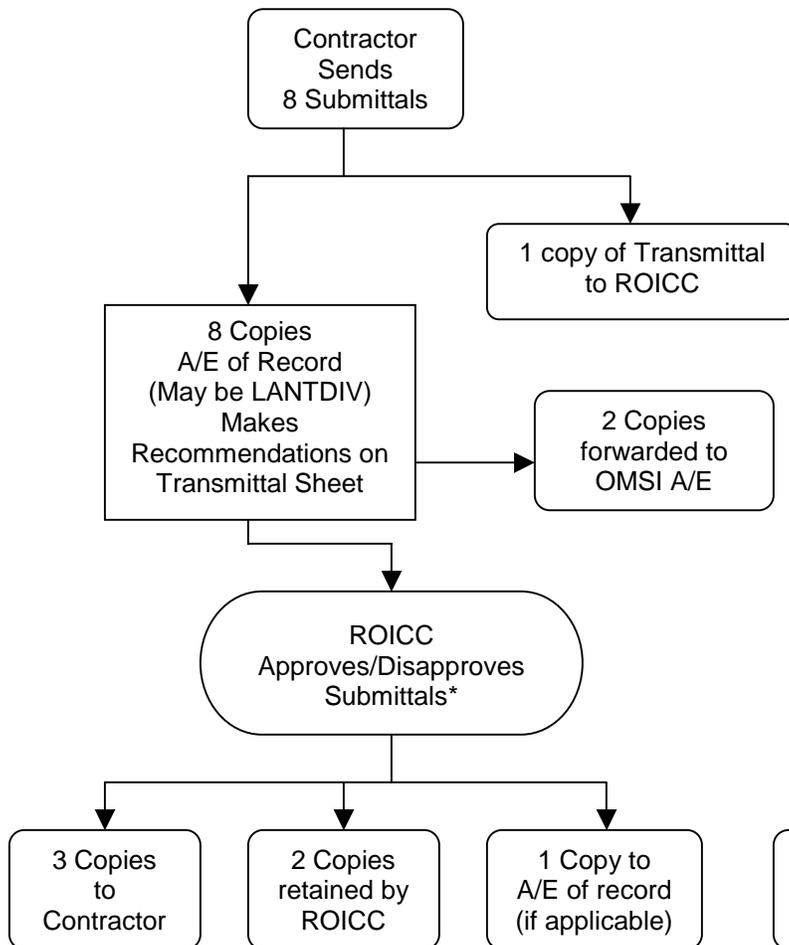


**\* Note: LANTDIV reviewer may keep a copy of submittal, resulting in one less copy for Contractor.**

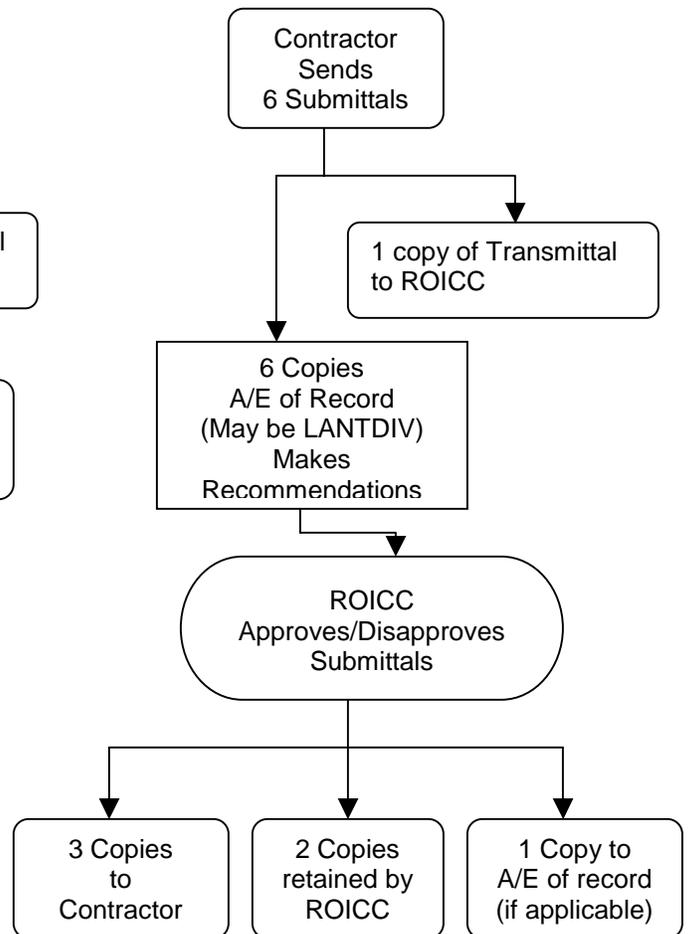
## Stateside Submittal Processes

### D. DEVIATION APPROVAL

#### OMSI Contracts



#### NON-OMSI Contracts

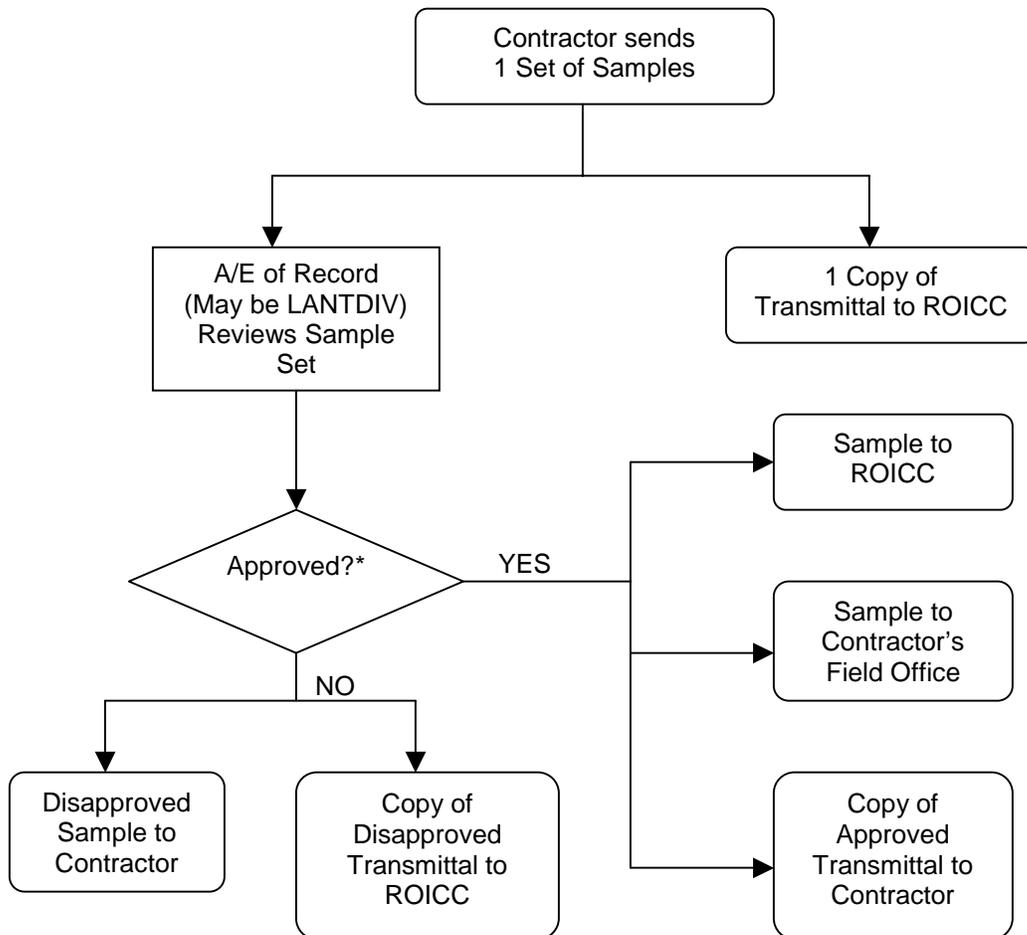


\*ROICC to make sure OMSI A/E receives approved deviation information.

## Stateside Submittal Processes

### E. SAMPLES APPROVALS

#### OMSI and NON-OMSI Contracts

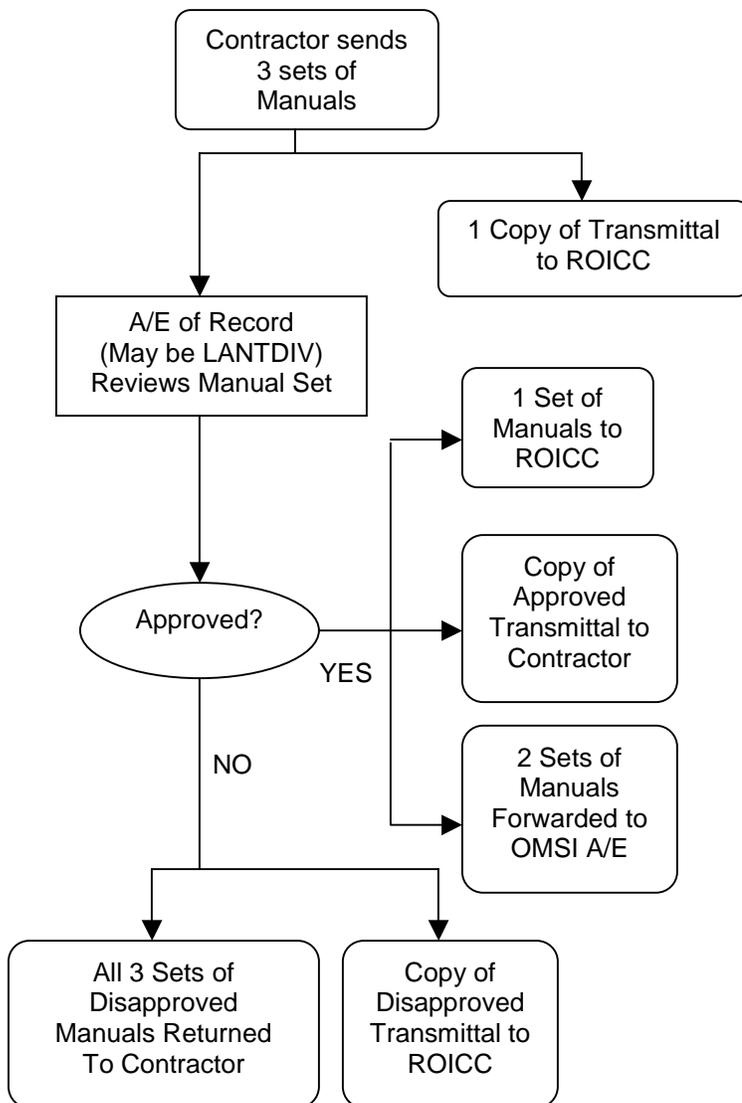


**\*ROICC to coordinate review and approval with LANTDIV and/or Customer as necessary.**

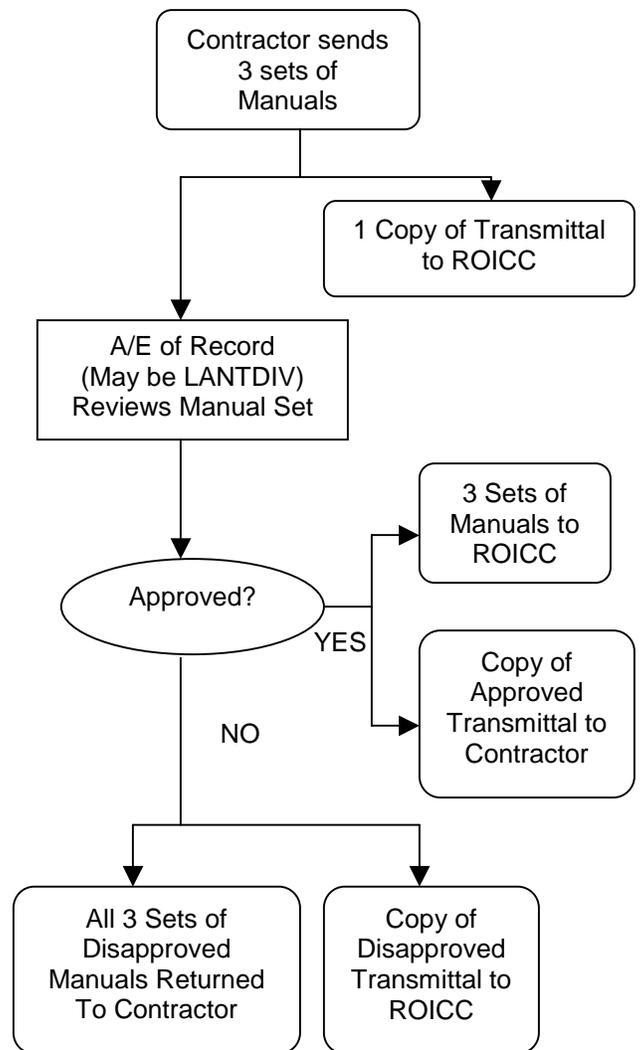
## Stateside Submittal Processes

### F. OPERATION & MAINTENANCE MANUALS (Includes “Data Packages”)

#### OMSI Contracts

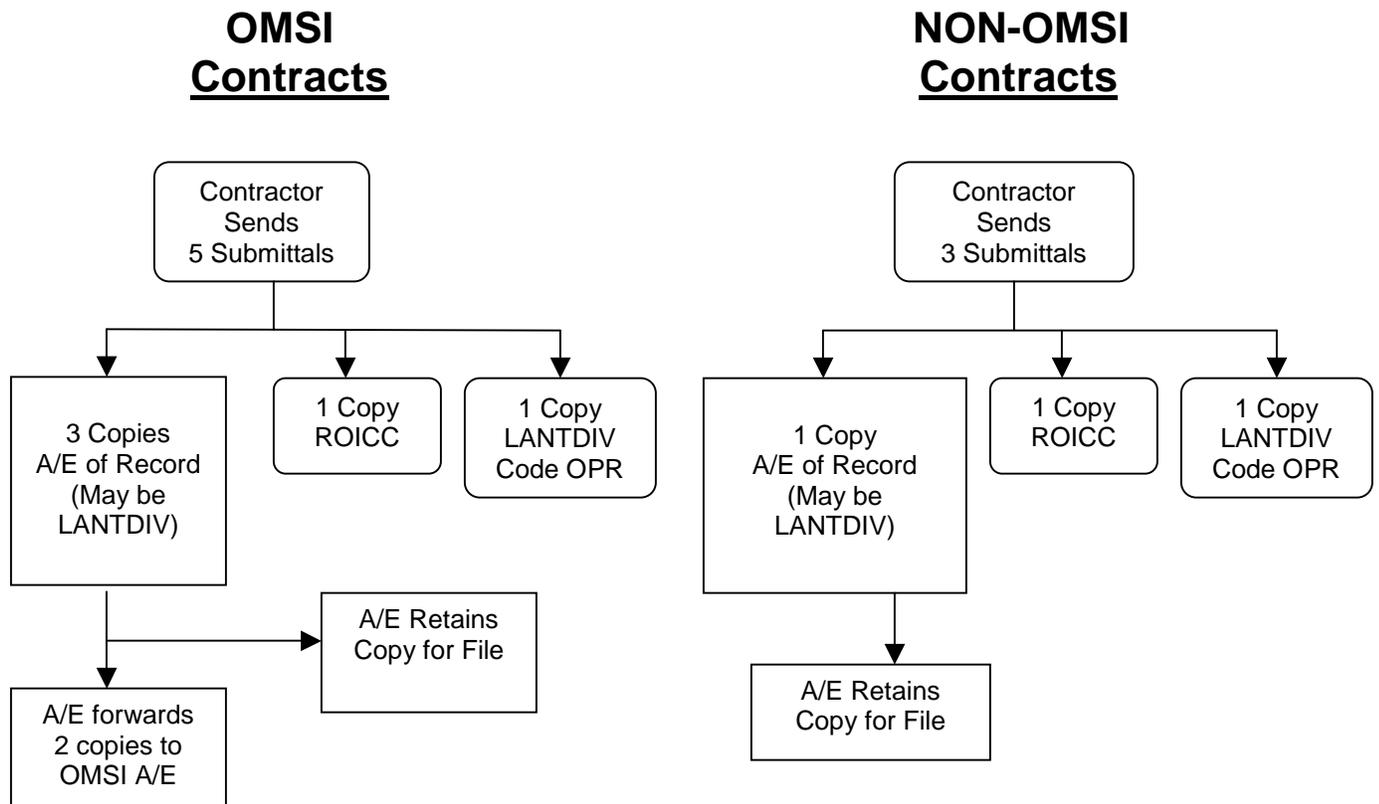


#### NON-OMSI Contracts



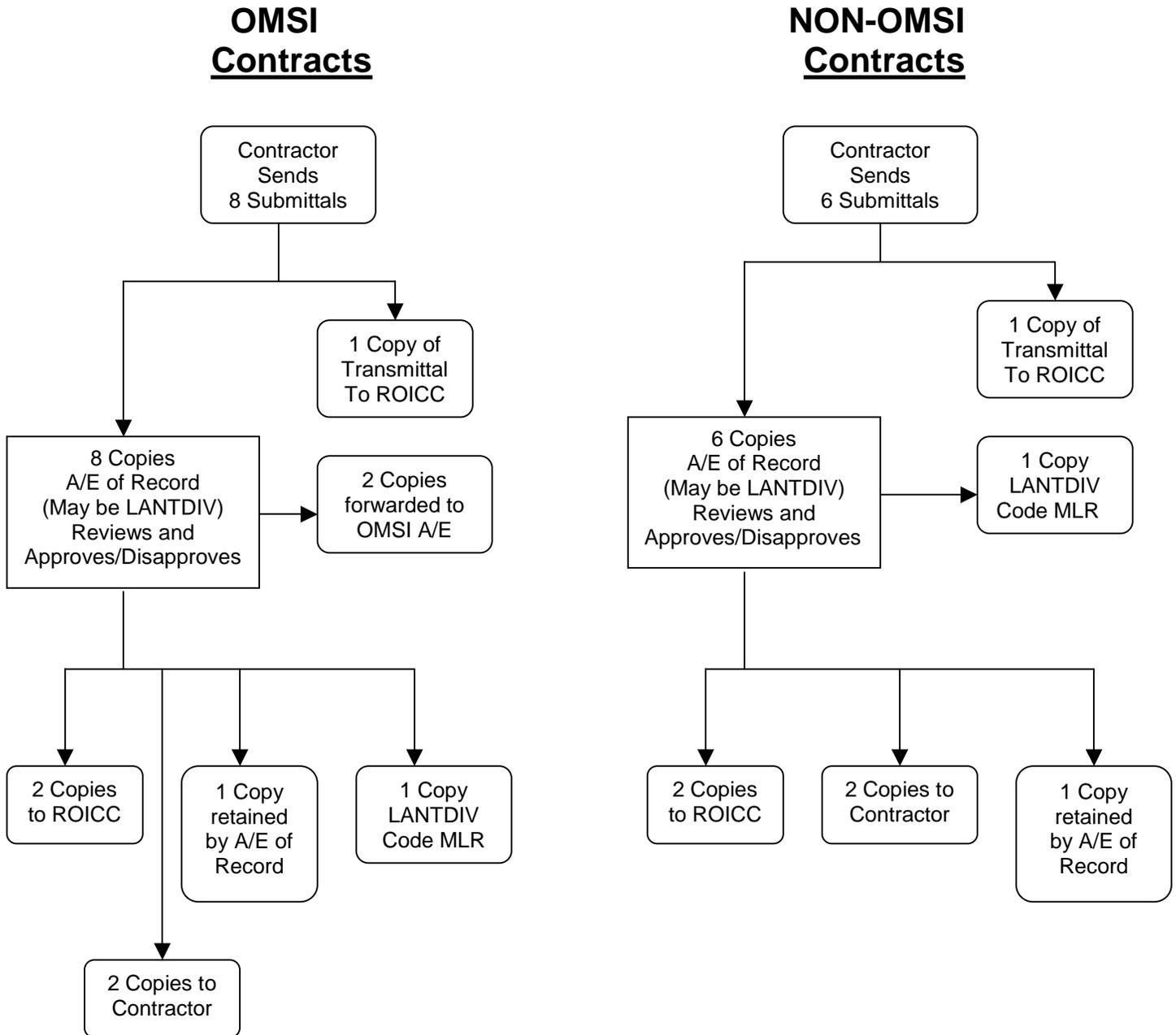
## Overseas Submittal Processes

### A. APPROVAL BY CONTRACTOR



## Overseas Submittal Processes

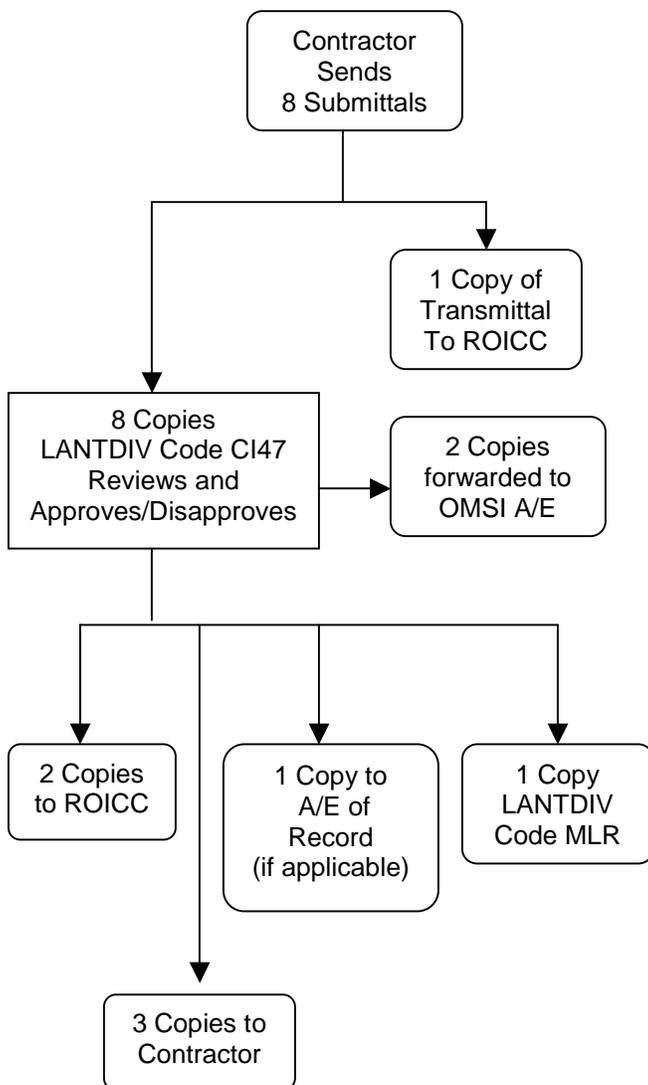
### B. APPROVAL BY A/E



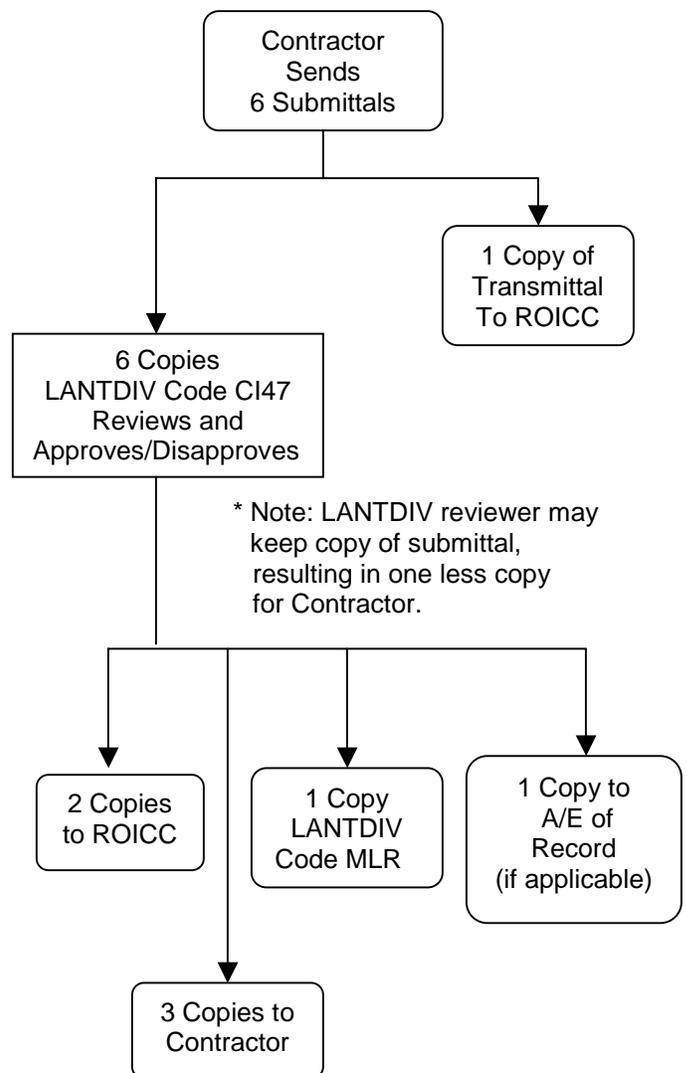
## Overseas Submittal Processes

### C. LANTDIV TECHNICAL APPROVALS

#### OMSI Contracts



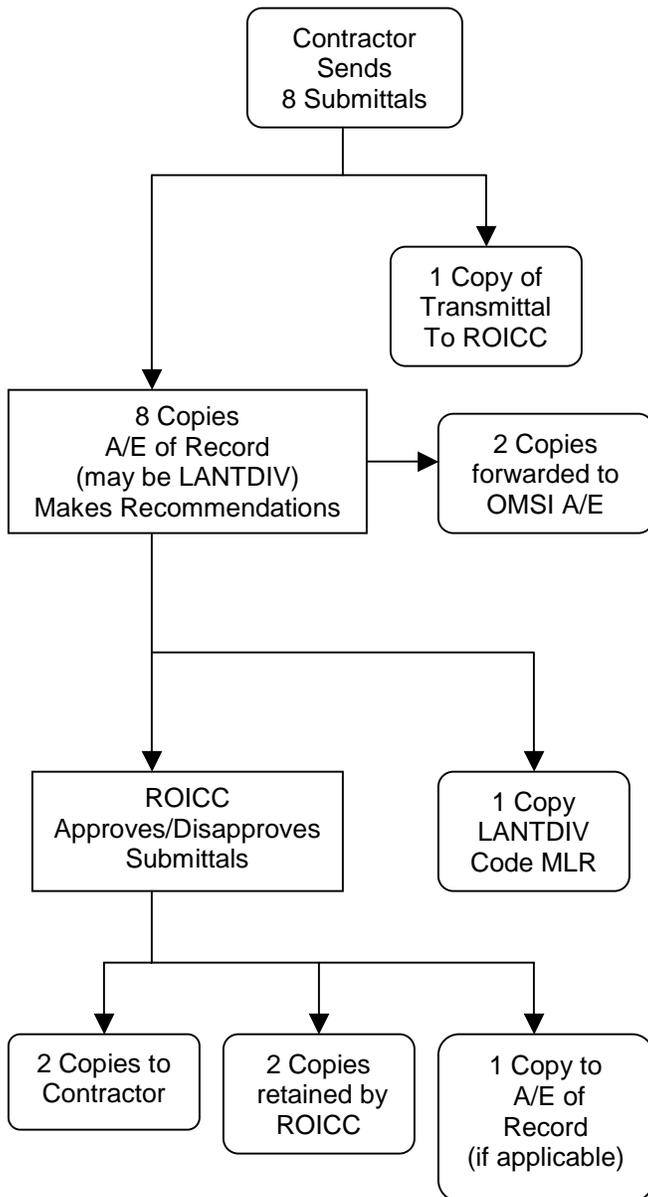
#### NON-OMSI Contracts



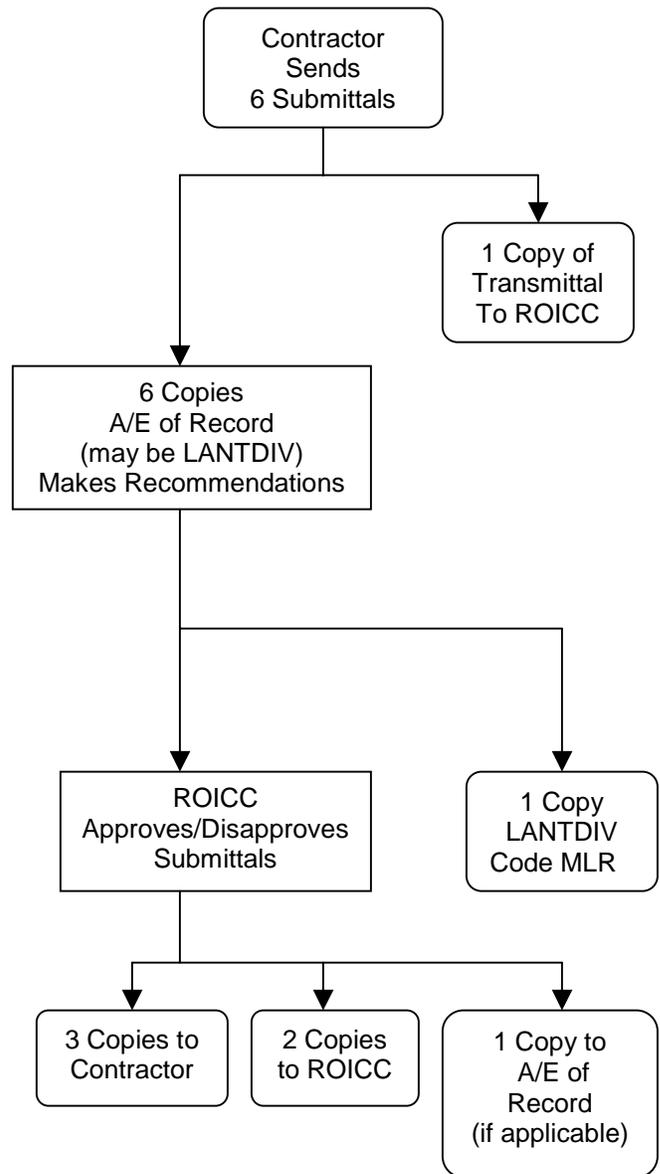
# Overseas Submittal Processes

## D. DEVIATION APPROVALS

### OMSI Contracts

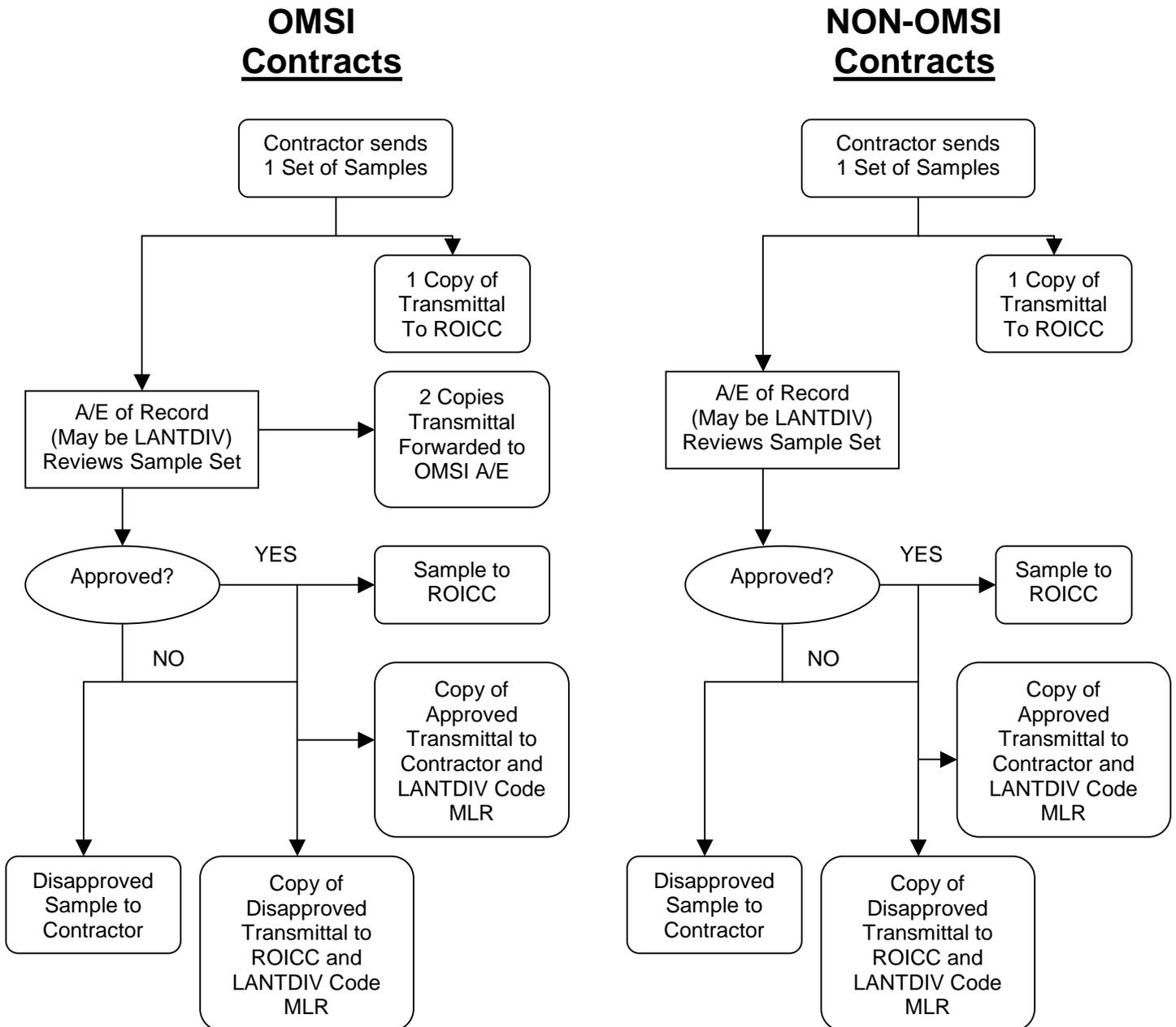


### NON-OMSI Contracts



## Overseas Submittal Processes

### E. SAMPLE APPROVALS

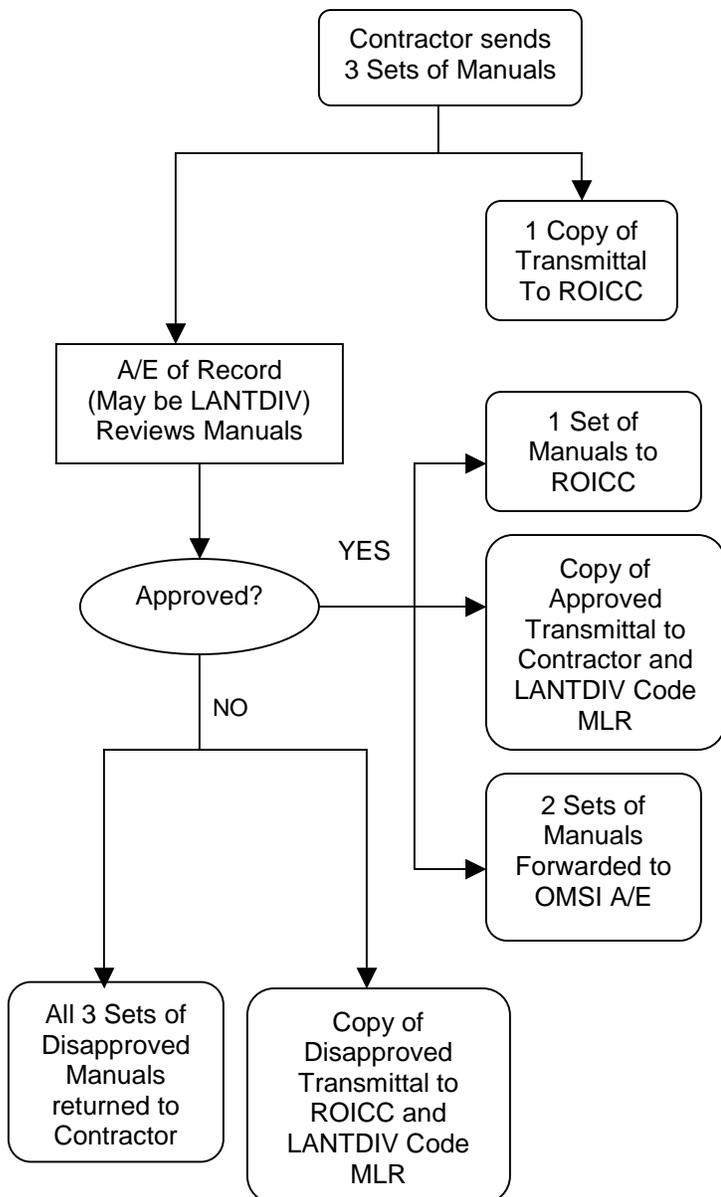


**NOTE: Flow Diagram is the same**

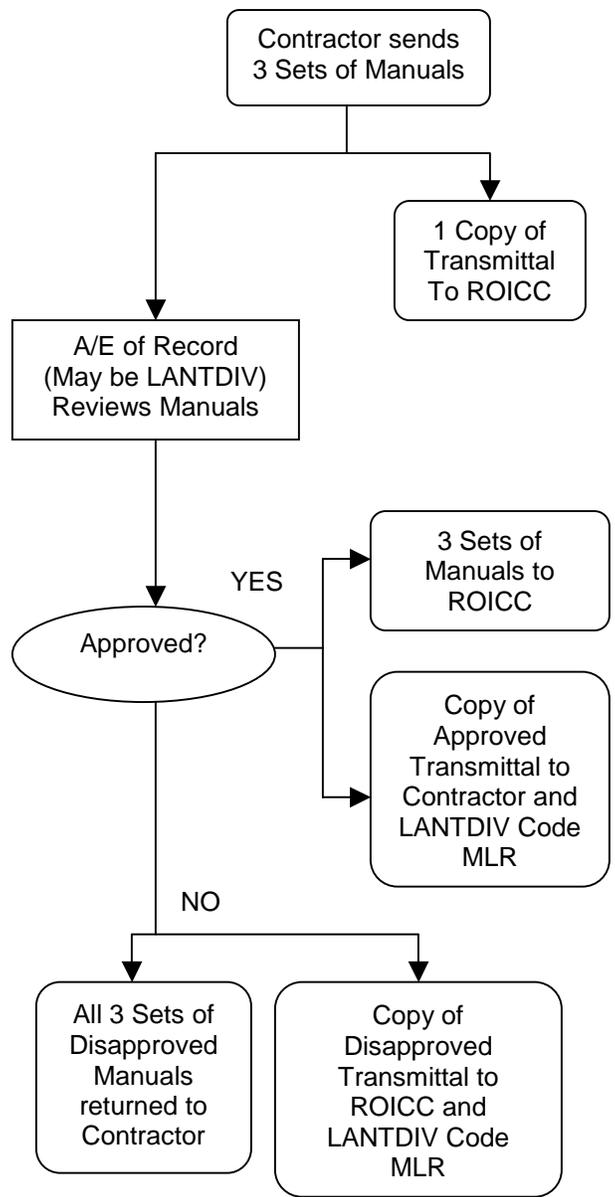
## Overseas Submittal Processes

### F. OPERATION & MAINTENANCE MANUALS (Includes "Data Packages")

#### OMSI Contracts



#### NON-OMSI Contracts



### Miscellaneous Submittal Review Aspects

When a submittal must be revised by the A&E due to such reasons as changed Government requirements or correction of design deficiency, it must be forwarded to the ROICC with an explanation for the new requirements and the estimated change in contract price for the contractor to comply with the new requirements.

Only certifications which state that the item submitted complies with the contract requirements are acceptable. A statement that the item submitted is equal to or better than the specified item will not suffice.

When a submittal cannot be reviewed within two weeks, the ROICC must be advised of the estimated date of review completion.

The contractor has also been requested to submit three copies of his submittal register to your office. It is requested that you review this register to assure that all submittals required by the contract specifications have been included. If the register is acceptable, two copies should be forwarded to the ROICC. If the register is not complete, it should be returned to the contractor, with comments, for correction. One copy of this register and comments should be forwarded to the ROICC.

- **Record Drawings**

See Post Design Services, As-Built Record Drawings, Chapter 5.