

TABLE OF CONTENTS
F 600 SEWER CONSTRUCTION

| SECTION NO. | SUBJECT | DATE |
|--------------------|----------------------------------------------------------|-------------|
| F 610 | RESPONSIBILITIES OF THE ENGINEER | June-92 |
| F 611 | REVISION OF PLANS | " |
| F 612 | INTERPRETATION OF SEWER PROJECT PLANS AND SPECIFICATIONS | " |
| F 613 | APPROVAL OF ALTERNATIVE MATERIALS | " |
| F 614 | CONSTRUCTION PROGRESS | " |
| F 615 | DOCUMENTATION OF CONSTRUCTION | " |
| F 616 | TIME PERIODS RESTRICTING CONSTRUCTION | " |
| F 616.1 | CONSTRUCTION DURING THE RAINY SEASON | " |
| F 616.2 | CONSTRUCTION DURING THE HOLIDAY SEASON | " |
| F 616.3 | CONSTRUCTION DURING THE NIGHT | " |
| F 616.4 | CONSTRUCTION DURING WEEKENDS | " |
| F 620 | RESPONSIBILITIES OF OTHER AGENCIES | " |
| F 621 | DEPARTMENTS | " |
| F 621.1 | DEPARTMENT OF GENERAL SERVICES, STANDARDS | " |
| F 621.2 | DEPARTMENT OF TRANSPORTATION, TRAFFIC | " |
| F 622 | BUREAUS WITHIN THE DEPARTMENT OF PUBLIC WORKS | " |
| F 622.1 | BUREAU OF CONTRACT ADMINISTRATION | " |
| F 622.2 | BUREAU OF STREET LIGHTING | " |
| F 622.3 | BUREAU OF STREET MAINTENANCE | " |
| F 622.4 | BUREAU OF SANITATION | " |
| F 623 | DISTRICT/DIVISIONS OF THE BUREAU OF ENGINEERING | " |

| SECTION NO. | SUBJECT | DATE |
|--------------------|---------------------------------|-------------|
| F 623.1 | DISTRICT OFFICES | June-92 |
| F 623.2 | SURVEY DIVISION | " |
| F 623.3 | PROJECT MANAGEMENT DIVISION | " |
| F 623.4 | CONSTRUCTION DIVISION | " |
| F 630 | CHANGE ORDERS | " |
| F 631 | TYPES OF CHANGE ORDERS | " |
| F 631.1 | REGULAR CHANGE ORDER | " |
| F 631.2 | PRELIMINARY CHANGE ORDER | " |
| F 631.3 | EMERGENCY CHANGE AUTHORIZATION | " |
| F 631.4 | INTERIM CHANGE AUTHORIZATION | " |
| F 632 | BOARD REPORTS FOR CHANGE ORDERS | " |
| F 640 | FIELD OFFICES | " |
| F 650 | SEWER SURVEYS | " |
| F 660 | SHOP DRAWINGS | " |
| F 670 | FIELD INSPECTIONS | " |
| F 671 | PERIODIC INSPECTIONS | " |
| F 672 | PARTIAL ACCEPTANCE INSPECTION | " |
| F 673 | FINAL INSPECTION | " |
| F 680 | "AS-BUILT" DRAWINGS | " |
| F 681 | ASSESSMENT ACT "AS-BUILTS" | " |
| F 681.1 | DESIGN DIVISION/DISTRICT | " |
| F 681.2 | OTHER AGENCIES | " |
| F 682 | CLASS "B" PERMIT "AS-BUILTS" | " |
| F 683 | INTERIM CHANGE AUTHORIZATIONS | " |

| SECTION NO. | SUBJECT | DATE |
|--------------------|------------------------------|-------------|
| F 684 | SHEET ADDITIONS OR DELETIONS | June-92 |
| F 684.1 | ADDITION OF A SHEET | " |
| F 684.2 | DELETION OF A SHEET | " |
| F 684.3 | SHEET SUBSTITUTION | " |

F 600 SEWER CONSTRUCTION

Except for permit projects, City sewers shall be constructed by a contractor(s) under contract to the Board of Public Works. The contract shall be awarded to the lowest responsive bidder in competitive bidding procedures conducted by the Board. Upon award of the contract, the Bureau of Contract Administration (BCA) shall be responsible for construction management and inspection. The Engineer of Surveys provides construction staking services to the contractor. The Engineer is essentially a technical adviser and coordinator during construction. Design and plan change orders needed during construction remain the responsibility of the BE. Other agencies, including City agencies, may be involved during construction. Good public relations, coordination and liaison shall be a requisite in the Engineer's duties during construction. The Engineer in the SSPWC implies the City Engineer. During construction the Project Engineer represents the City Engineer.

F 610 RESPONSIBILITIES OF THE ENGINEER

If a sewer project is well designed and planned the Engineer's construction work should be minimized.

A good sewer plan should not specifically direct the contractor as to methods and procedures to construct the sewer. It should, instead, indicate to the contractor the specific desired result required by the contract.

F 611 REVISION OF PLANS

Revisions to plans become necessary due to unforeseen conditions occurring during construction.

All problems occurring during construction shall be investigated and resolved to the satisfaction of all affected parties before revising the plans. The revisions shall be coordinated by the Construction Division in conformance with change order procedures. See Parts C and M of the Bureau Manual and F 630.

F 612 INTERPRETATION OF SEWER PROJECT PLANS AND SPECIFICATIONS

For the order of precedence of contract documents, see 2-5.2 SSPWC. Where the precedence of a document with respect to other documents is an issue and the SSPWC cannot solve the issue, the Engineer's interpretation and decision relative to the plans and Special Provisions shall be considered final.

F 613 APPROVAL OF ALTERNATIVE MATERIALS

The contractor may utilize alternative materials where permitted and approved by the Engineer. In accordance with the SSPWC, the contractor is responsible for allowing sufficient lead time for the Engineer to analyze and approve alternative materials. The Engineer may use technical brochures, specifications, and any other material provided by a manufacturer, distributor, vendor or contractor, as well as, any other material considered accurate and useful to determine the acceptability of an alternative material. The Engineer may also require the contractor to furnish certified laboratory tests to support the contractor's proposal when found necessary by the Engineer. The City Department of General Services (DOGS), Standards (STDS) will perform tests on samples submitted by

the contractor and will provide a report at the contractor's expense where necessary and requested by the Engineer.

In all cases, Division and District Engineers shall investigate prior to approving any new material.

F 614 CONSTRUCTION PROGRESS

All communications with the BCA shall be documented in order to maintain records and to keep the project file current with construction progress. Periodic field trips may be necessary to achieve this goal. The Engineer shall make an effort to be familiar with the project inspection and the progress reporting system.

F 615 DOCUMENTATION OF CONSTRUCTION

As part of the Public Works construction program, securing documents of historical value for public information and archives is encouraged. Construction progress, especially of major sewers or structures, should be photographed for future reference. Photos and other documents (including movies and video recordings) may be useful in the event of a claim against the City. The Engineer should be alert to such possibilities before and during construction and should develop a construction file for this type of documentation.

F 616 TIME PERIODS RESTRICTING CONSTRUCTION

In general, contractors are permitted to conduct their construction operations during normal working hours. Restrictions to construction operations occur during peak traffic volumes, inclement weather, special holiday periods, at night, and sometimes on weekends. See Part C of the Bureau Manual.

F 616.1 CONSTRUCTION DURING THE RAINY SEASON

The rainfall season as defined in Storm Drain Design Part G of Bureau Manual falls normally between November 15 and April 15. During this time, some work may be restricted, particularly when construction of a sewer also involves storm drains. Construction

during this period of time is normally permitted, provided that the contractor takes proper steps to control erosion and keep rainfall runoff from entering the sewer system. Additionally, the contractor must ensure the safety of the workers, trench, materials, and the public way, as well as adjoining property and vehicular and pedestrian traffic.

The plans and specifications should include the specific directions including the requirement of sealing all openings into operating sewers. Dewatering requirements for trenches may be specified if the Engineer believes it is necessary to protect the trench and trench supports, especially in sandy soils.

F 616.2 CONSTRUCTION DURING THE HOLIDAY SEASON

The "Holiday" season is generally applicable to Christmas. The period commences November 15 and ends January 2. Permits to do work during the holiday period shall not be issued except for urgent/emergency situations.

The Engineer of Permits maintains the current "Holiday Season" street restriction list. In addition to the Central Business District of the City, small localized areas, including shopping centers and similar facilities may be adversely affected so as to require restrictions for construction operations at certain times of the year. Similarly, localized facilities other than commercial, such as recreational, may be seriously affected at various times during the year and should be considered for restrictive construction operations.

F 616.3 CONSTRUCTION DURING THE NIGHT

Night construction shall be avoided especially in residential areas. In order to conduct construction operations at night, which may be defined as during hours of darkness, a permit shall be secured by the contractor from the Police Department. Permits, except for emergency operations, will not be granted in residential areas. Permits for night construction in areas other than residential may be approved, but only if the nightwork does not constitute a nuisance or other disturbance to the public.

Permits will be approved for emergency conditions that affect the public health and safety. The contractor's schedule of operations should be carefully examined to assure that nightwork will be avoided.

Some sewer work will be necessary when a low flow condition occurs during the night hours. In those cases, there may be no other alternative, and the nightwork will be necessary.

F 616.4 CONSTRUCTION DURING WEEKENDS

Construction on weekends shall be discouraged, and should be allowed only for compelling reasons.

Prior to approval being granted for weekend work, the Engineer shall investigate to determine if adverse conditions would occur during such weekends. Consideration shall be given to religious, cultural, recreational and commercial facilities.

F 620 RESPONSIBILITIES OF OTHER AGENCIES

Other agencies may be involved during construction of sewer projects. Some of them may have major responsibilities while others may have a minor role. See Part M of the Bureau Manual.

F 621 DEPARTMENTS

F 621.1 DEPARTMENT OF GENERAL SERVICES, STANDARDS

The Department of General Services, Standards DOGS (STDS) collects samples for testing, as well as, testing the contractor's materials submitted for approval. See [F 613](#). The Soils Engineer provides consultation to STDS relative to the logs of soil borings and the Geology and Soils report for sewer projects. Liaison between the contractor and STDS should be provided by the Engineer.

F 621.2 DEPARTMENT OF TRANSPORTATION, TRAFFIC

The Department of Transportation, Traffic (LADOT) Transportation Engineer will review traffic control matters, including traffic control plans for sewer projects, if the SSPWC and the current [Standard Plan S-610](#) do not suffice. The Traffic Signal Superintendent inspects traffic signal installations and any repair work made necessary by the sewer construction.

F 622 BUREAUS WITHIN THE DEPARTMENT OF PUBLIC WORKS

F 622.1 BUREAU OF CONTRACT ADMINISTRATION

The Inspector of Public Works shall be responsible for construction. The Bureau of Contract Administration (BCA) Inspector represents the City Engineer at the construction site, as well as other locations such as manufacturing and fabrication plants. The Inspector ensures the project is completed in accordance with the plans and specifications. The Inspector's duties include:

- a. Ensuring that applicable laws and regulations are complied with during construction of the project.

- b. Ensuring that the contractor complies with the requirements of the plans, specifications and other contract documents including permits.
- c. Securing samples from the contractor's materials proposed for installation or arranging for and coordinating the efforts of others in securing such samples.
- d. Arranging for and coordinating any partial or final inspection of construction for acceptance approval.
- e. Maintaining good public relations with the public and the contractor.
- f. Acting as a field liaison for the Engineer.
- g. Processing the contractor's construction progress reports for payment purposes.
- h. Monitoring DBE/WBE hiring requirements/practices/goals.
- i. Requiring on all Class "B" Permit Projects that the permittee and contractor complete whole portions of an improvement. To minimize instances of work being performed without inspection, the following note shall be added to Class "B" Permit construction plans in the Notice to Contractor:

"All work shown on this plan is to be performed in the presence of a City Department of Public Works Inspector. Call (insert applicable number) 24 hours prior to commencing any work".

F 622.2 BUREAU OF STREET LIGHTING

The Bureau of Street Lighting (BSL) is responsible for street lighting work required by the plans and specifications. All questions relative to construction in the field and interpretation of the street lighting plans, details, and specifications shall be directed to the BSL.

F 622.3 BUREAU OF STREET MAINTENANCE

The Director of the Bureau of Street Maintenance (BSM) is responsible for the existing public way. There are several divisions of BSM that are usually concerned with sewer construction work. The Street Use Division is responsible for utility excavations and backfill, as well as, the storage of materials within public ways. The Street Tree Division provides tree trimming services in both the paved roadway and the sidewalk area. If existing trees are to be removed due to sewer construction, the Street Tree Division will mark locations for new trees in the field at the request of the contractor.

F 622.4 BUREAU OF SANITATION

The BSAN operates and maintains the sewers and various appurtenant facilities, including pumping stations. Plan sets for all proposed sewer projects shall be submitted to the BSAN for review at Preliminary and Final Design.

Upon completion of construction of a sewer project and final acceptance by the Engineer, it shall be assigned to BSAN. This includes not only BE projects constructed under a contract but also all other projects authorized by a permit, or assessment proceedings, or by the authority of another agency where the City assumes jurisdiction over the sewer facilities.

The BSAN provides all necessary labor and material for tapping an existing sewer and installing saddles (See Section 64.20 LAMC and F 489 and Part C of the Bureau Manual).

Also under the jurisdiction of the BSAN is the disposal of any groundwater subdrainage flow, disposal of industrial wastes or any other flow entering the sewer systems. For any such disposal, a permit must be secured by the discharger. These permits will be issued pursuant to NPDES requirements. In general, all "non-sewage" flows shall be discharged, whenever practical, into storm drains under permit from the BSAN. Exceptions to this rule are sewage and industrial wastes, when allowed to be disposed of in a sewer. This includes wastes pumped out of septic tanks and

cesspools, as well as any other waste which could harm the storm drain system. Toxic and other dangerous wastes are not permitted to be discharged into the sewer system. Wastes collected and/or pumped from swimming pools and similar wastewater shall be disposed into the sewage system only when there is no other feasible sanitary means of disposal.

F 623 DISTRICT/DIVISIONS OF THE BUREAU OF ENGINEERING

F 623.1 DISTRICT OFFICES

The District Engineers shall be responsible for the planning, design and construction of sewers, and maintenance of substructure record maps (see F 321.3). They also issue the various permits required during sewer construction. (See Part C of the Bureau Manual). Since the Geotechnical Services Section provides the Engineering Geology and/or Soils Report, Construction Division will provide consultation on this matter during project construction. (See F 491.1 and F 493, et seq.)

F 623.2 SURVEY DIVISION

The Survey Division (SURV) provides surveying assistance to the Engineer during design. During construction, the SURV provides the contractor with all survey field data including ties and stakes for locating the sewer and other structures both horizontally and vertically. (See Part J of the Bureau Manual).

F 623.3 PROJECT MANAGEMENT DIVISION

The Project Management Division (PMD) acts as liaison between the City and the Local Program Administrator (through CALTRANS) on projects which are constructed with grant monies. (See F 121.11 and F 132). For additional construction responsibility, see Part E of the Bureau Manual under Assessment Act projects.

F 623.4 CONSTRUCTION DIVISION

The Construction Division (Const Div) is responsible for change orders, specification interpretations, utility substructures coordination and related tasks during sewer construction. (See F 321.332 and F 321.342 and F 630). For additional information, see Parts C, H and M of the Bureau Manual. The Geotechnical Services Section provides consultations pertaining to any soil and geologic problem during construction (See F 491 and F 493, et seq.)

F 630 CHANGE ORDERS

Change orders may be issued at the request of the contractor, a utility owner, or any other entity affected by construction of the project or the City Engineer. All change orders shall be authorized and issued by the City Engineer. A change order affects costs and/or construction time. Change Order policy and procedures may be found in Parts H and M of the Bureau Manual. (See F 623.4)

F 631 TYPES OF CHANGE ORDERS

Besides the regular change order which directs work to be performed, there are others, including the Preliminary Change Order, the Emergency Change Authorization and the Interim Change Authorization. The Interim Change Authorization form is applicable to Class "B" Permit projects.

F 631.1 REGULAR CHANGE ORDER

When the need for a change-in-construction occurs the Engineer shall prepare a regular change order form. All data required on the change order form shall be per H 770 et. seq. of the Bureau Manual as modified by possible Special Order. If an engineering drawing would be effective in showing the required change(s), the Engineer shall also use the Standard Change Order Sketch Form. The change order forms and sketches shall be transmitted to the Construction Division Change Order Section for approvals.

F 631.2 PRELIMINARY CHANGE ORDER

The Preliminary Change Order shall be prepared also per F 631.1. The term Preliminary Change Order is used because it is not an order to perform a specific requirement. Rather, it is an order not to perform any work which would interfere with the proposed change order. Copies shall be conspicuously stamped "Preliminary Change Order" and distributed to all affected entities prior to securing the required approvals for a regular change order. The Preliminary Change Order shall not be used with an Emergency Change Authorization. It shall be followed as soon as possible by the regular change order approved by the City Engineer and, if

applicable, the Chief Accountant and the Board of Public Works.

F 631.3 EMERGENCY CHANGE AUTHORIZATION

The Emergency Change Authorization form shall be used for changes which cannot be delayed for normal processing. The monetary limit of Emergency Change Authorizations shall be per Std Plan S-610 or current Special Order. When there is either a "contract unit price" or a "stipulated price", as part of the contract, those prices shall be the price basis for change order purposes.

Any cost not included in the contract bid documents shall be negotiated by the Construction Division and the signed approval of all entities affected shall be secured before commencing the work.

When negotiation of costs not included in contract bid documents does not result in an agreement, the costs shall be in conformance with the applicable section of the SSPWC entitled "Extra Work". See H 776 of the Bureau Manual.

F 631.4 INTERIM CHANGE AUTHORIZATION

The Interim Change Authorization (ICA) is applicable to Class "B" Permit projects and is self-explanatory. The ICA is limited to 10 percent of the bonded cost of those projects in which the City participates financially. See Part H of the Bureau Manual for Class "B" Permit construction changes.

F 632 BOARD REPORTS FOR CHANGE ORDERS

Examples of Board Reports by the City Engineer in conjunction with change orders are included in Parts H of the Bureau Manual. The format indicated therein shall be used for all BE Board Reports. Change Orders which increase contract costs by a specific limited amount as defined in the current [Standard Plan S-610](#) shall be accompanied by a Board Report. If funds must be transferred or the availability or unavailability of funds needs to be determined, the Chief Accountant of the Bureau of Accounting must approve and sign the Board Report. See H 770, et. seq.

F 640 FIELD OFFICES

Sewer construction requiring continuous inspection shall have a field office. For procedures relative to determining the field office requirements, see F 512.131. Field offices will usually be furnished with telephone and sanitary facilities, as well as, furniture including plan storage for the use of the Surveyor, the Inspector and the Engineer. A survey office shall be provided for sewer construction projects when requested by the Engineer of Surveys.

F 650 SEWER SURVEYS

Sewer construction surveys shall be performed by the SURV when requested by the contractor or the Inspector. The policy and procedures are in Part J 610 et. seq. of the Bureau Manual. Surveys for tunneling and jacking of sewer pipe require special consideration. (See F 477.2 and J 660 et. seq)

F 660 SHOP DRAWINGS

The Engineer shall check shop drawings submitted by the contractor or the material and equipment supplier(s). Shop drawings shall be returned to the contractor for correction or revisions and resubmittal for approval when necessary. The contractor's construction schedule shall account for shop drawing requirements. In addition to those shop drawings required by the SSPWC, pipe laying diagrams shall be provided for sewer projects in accordance with [Standard Plan S-610](#), note 1-13. Approved alternative materials or construction shall be noted in preparing "As-Built" records. (See [F 613](#))

On Class "B" Permit Projects, see H 172.2 and H 740 of the Bureau Manual. All shop drawings required in accordance with Section 2-5.3 of the SSPWC as modified by the current issue of [Standard Plan S-610](#) shall be checked and approved by the private engineer responsible for the project design. No further review or approval by the Bureau of Engineering shall be required unless specifically noted on the plans or in special provisions.

Four copies of approved shop drawings should be transmitted by the private engineer directly to the Bureau of Contract Administration. Advance copies, which are hand delivered to the job site to expedite construction, shall be in addition to the above.

F 670 FIELD INSPECTIONS

The Engineer shall make periodic field inspections of the sewer construction work for informative purposes and to substantiate project progress as necessary. The Engineer shall be present at partial and final acceptance inspections. (See [F 622.1](#))

F 671 PERIODIC INSPECTIONS

Periodic inspections will expose new engineers to field application techniques and to elements of sewer construction in actual progress. During field inspection, construction safety policy and procedures shall continue to be enforced. (See F 162, J 170 et. seq. and J 180, et. seq.)

Memorandum for file forms shall be completed for any field inspection of a sewer project site, including fabrication and manufacturing sites. It shall record all persons contacted with accurate time, date and subject matter discussed or observed. The memorandum shall be filed in the project Work Order folder.

F 672 PARTIAL ACCEPTANCE INSPECTION

The City Engineer may inspect part(s) of completed work and accept such part(s) as completed for convenience to the public. Partial acceptance will relieve the contractor of further responsibility for maintenance and liability of the accepted part prior to acceptance of the entire project. The Inspector of Public Works will make a Statement of Partial Completion, describing the specific part of the sewer project considered completed and acceptable to the City Engineer. It shall list exceptions or conditions before the City Engineer's acceptance. The statement shall be approved by the City Engineer's authorized representative. (See Parts C and M of the Bureau Manual for Statement of Completion)

F 673 FINAL INSPECTION

The City Engineer shall be represented at the sewer project's final inspection. All deficiencies shall be noted on the Inspector's Final Inspection Correction List. The contractor shall correct all the deficiencies to the satisfaction of the Engineer. The Engineer shall verify that the deficiencies have been corrected. A Statement of Completion shall be made by the Inspector of Public Works after it has been determined that all deficiencies have been corrected to the satisfaction of the Engineer. The statement shall be approved by the City Engineer's representative. (See Parts C and M of the Bureau Manual).

The Division/District Engineer's Project Engineer shall transmit project acceptance documents to: (a) Construction Division for Cash Contracts; (b) Assessment Division for Assessment Act projects; and (c) For Class "B" Permit projects to the PMD. See Parts C and M of the Bureau Manual for detailed procedures.

F 680 "AS-BUILT" DRAWINGS

Upon completion of construction and final inspection by the City Engineer (F673) the work order shall be closed and As-Built plans recorded. The Engineer shall obtain original drawings and accomplish the following:

- a. Check the latest revision approval against the existing microfilm file to ensure that there is a microfilm record covering the revision approval(s).
- b. If the latest approval as dated is not on microfilm, a microfilm order shall be made before commencing "As- Built" entries.
- c. Check with the Construction Division Change Order Section for the last change serial number for the sewer project. Secure copies of all change orders executed and for which construction was performed.
- d. Enter all changes ordered on the tracings in pencil or ink. The correct contrast pencil shall be used for the class of tracing material.
- e. Changes which were made by other agencies or offices, such as traffic, street lighting or structures, may be made by the Designer depending upon the degree of "As-Built" changes required. If the responsible office for other work prepares the changes, the entire set of tracings shall be transmitted together with interdepartmental communication requesting the tracings be returned to the Designer for completion of the "As-Built" plans after the other office has completed entering the changes.
- f. Erasures shall be made instead of lining out invalid data. The Change Order Serial Number shall be entered on the plan in the general area of the change. Other data such as alternative construction completed shall be entered on the "As-Built". Types and classes of pipe are examples of such alternatives.

- g. The Project Disposition block in the lower right margin of the title sheet shall be completed with the Work Acceptance date and the Serial Number of the Notice of Closed Work Order. The date the changes for "As-Builts" were made along with the name of the person making the changes shall be entered on the lines provided. If no changes were made enter "No Changes".
- h. Draft in the words "AS-BUILT" in bold capital letters between the margin lines below the revision block on the title sheet. The letters shall be 3/10 inch high.
- i. Transmit the plans to Administrative Division (AD), Index to Records for processing. If a sheet has been deleted, substituted or added, it should be accompanied by an explanation. (See [F 683](#))

F 681 ASSESSMENT ACT "AS-BUILTS"

F 681.1 DESIGN DIVISION/DISTRICT

The procedure for Assessment Act project "As-Built" drawings is different from other types of projects. The tracings shall be secured before the project is completed. The microfilm check and the insertion of Change Order Serial Numbers are the same as for other projects. The insertion of the Change Order information on the plans is also identical. However, on Assessment Act projects, the Engineer shall make all the BE changes and shall not request other BE offices to place their changes on the plans. As with other projects, other agencies will be requested to enter their own changes on the plans. The "As-Built" tracings shall then be forwarded to the Assessment Division (ASD) as soon as possible. No later than 2 weeks after the final inspection date, ASD shall secure copies to use in determining assessable quantities. If no street lighting or traffic changes are necessary, ASD will return the "As-Builts" to the AD Vault. If such changes are required, ASD will return the tracings to the Designer for further processing.

F 681.2 OTHER AGENCIES

The Engineer shall then transmit the "As-Builts" to the Bureau of Street Lighting and/or the Department of Transportation, Area Traffic Engineer, so that they may place their changes on the tracings. The tracings shall be transmitted intact (i.e., all sheets included) with the request that the completed tracing "As- Builts" be returned to the Engineer. If street lighting and/or traffic changes are minor and the affected agencies agree the Engineer may place the needed "As-Built" street lighting and/or traffic changes on the tracings. Whenever this is accomplished, the Designer shall return the "As-Builts" to the AD vault for permanent storage. Upon the issuance of the "Notice of Closed Work Orders," PMD shall request the tracings from the vault and then enter the project disposition information on the Title Sheet. This includes the date of Work Acceptance and the Serial Number of the "Notice of Closed Work Orders". PMD will then transmit the "As- Built" tracings to AD, Index Unit. The same procedure is applicable to Combination (CIP/Assessment) Projects.

F 682 CLASS "B" PERMIT "AS-BUILTS"

Prior to final inspection, the Design District/Division Engineer (DDE) shall secure the tracings from the vault and commence As-Builts.

F 683 INTERIM CHANGE AUTHORIZATIONS

- a. When interim change authorizations are issued which require as-built changes to the plans, the private engineer shall be informed of this requirement and shall be requested to submit the revised plans within two weeks of such notification. The Project Engineer (PE) shall be responsible for making this notification at the conclusion of the project's final inspection. The PE shall also notify the permittee, in writing, of the need for these changes. The letter shall be mailed no later than two days after the final inspection. The letter shall be completed in triplicate. The original shall be sent to the permittee, one copy shall be sent to the private

engineer and one copy shall be retained in the district office's project file. The date of the notification and request shall be entered on the design office's project status card for follow up.

- b. If the permittee or its private engineer fails to comply with the notice and requirements, the DDE shall immediately make the changes and charge the time required to perform the work to the Construction Permit Work Order. The Final Inspection Correction List shall not be approved until this work has been accomplished satisfactorily. Prior to the DDE preparing the "As-Built" drawings, every effort shall be made to secure the cooperation of the permittee or its private engineer in having them prepare the "As-Built".
- c. The changes shall be made by lining out the superseded part and entering the "As-Built" data adjacent to it. Erasures may be made if necessary. Identical contrast line work shall be used. The date of the change shall be entered near the changed data. If an option was allowed, enter the alternative constructed. The correct HC "Tee" or "Wye" locations shall be recorded at this time.
- d. On the Title Sheet, the words "As-Built" shall be entered below the revision block and between the margin lines in letters 3/10 inch high. Even if no changes were required for the project, this requirement must still be executed.
- e. If the permittee or its private engineer prepares the "As-Built", the plans shall be returned to the DDE. The Designer shall verify that the construction changes were made in the Project Disposition Block and shall enter the date. If no construction changes were required, it should be so noted.
- f. Transmit the plans to the AD, Index Unit. If prints are required a photocopy request shall accompany the plans.

F 684 SHEET ADDITIONS OR DELETIONS

The "As-Bid" and "As-Built" sheet numbering sequence shall be identical. For Assessment Act or Combination Projects, the PMD shall be consulted prior to adding, substituting or deleting sheets.

F 684.1 ADDITION OF A SHEET

If a change order requires an additional sheet, it shall be added at the end. It shall be noted 1/4-inch high above the revision block as follows: "THIS SHEET ADDED. SEE CHANGE ORDER NO. ____." The Index to Sheets, Key Maps, sheet cross references etc., shall be revised accordingly. The total number of sheets shown on the Title Sheet, the old last sheet and the new last sheet shall reflect the additional sheet. Sheets may need to be added to cover "As-Built" conditions for optional construction, shop drawing records, etc.

F 684.2 DELETION OF A SHEET

If an entire sheet is to be deleted, a large "X" covering the entire sheet shall be placed on it and in large letters write the word "VOID" across the sheet. Above the revision block, insert 1/4 inch high "THIS SHEET VOIDED. SEE CHANGE ORDER NO. ____." The sheet shall be retained in the set of plans. Revise Index to Sheets, Key Map, Sheet References as necessary.

F 684.3 SHEET SUBSTITUTION

If a change order deletes a sheet as per F 684.2 but requires construction as shown on a new sheet, the new sheet shall be inserted in the plan set and the deleted sheet removed and labeled "VOID" as per F 684.2. The voided sheet shall be rolled separately from the plan set, but transmitted to the Index Unit. The new sheet shall have the voided sheet sequential number and it shall be stated in the revision block "THIS SHEET SUBSTITUTED FOR OLD SHEET NO. ____."

Obtain the Division/District Engineer's signature on the substituted sheet and the revisions.

If the sheet title or heading is different, revise the Index to Sheets accordingly.