

8. CONSTRUCTION SCHEDULE

The project's authorizing legislation (PL 106-382, October 27, 2000) provides that funds for construction are to be appropriated..."over a period of 10 fiscal years..." (114 stat 1451, p. 1457, Section 9). Based on this authorization, a construction schedule beginning in federal fiscal year (FY) 2002 and extending through a FY 2011 was developed as presented in Table 8-1.

8.1 Construction by Project Segment

Table 8-1 shows the start of construction in FY 2002 on the Missouri River intake and the water treatment plant. Expenditures on the intake and water treatment plant in FY 2003 are \$2,800,000 and \$814,000, respectively. Noncontract costs (planning, design and administration of project activities are shown for each year near the middle of the table for both the Fort Peck Assiniboine and Sioux Tribes and Dry Prairie. In FY 2003, the noncontract activities of the Tribes and Dry Prairie were scheduled at \$1,044,000 and \$51,000, respectively. The total appropriations needed for FY 2003 is presented as \$4,789,000. The present value of those expenditures referenced to FY 2002 is \$4,428,000.

The total (federal state and local) funding needs for construction is shown in Table 8-1 to begin at a modest level in FY 2001 of \$3,193,000 and to increase to \$19,156,000 by FY 2004. The schedule proposes increasing the total funding for construction in FY 2009 and FY 2010 to \$33,523,000 and \$35,120,000, respectively. The annual distribution of funding needs is only illustrative and reflects a recognition that appropriations will be lower in the early years of the project and higher in the later years. Given good performance in the mid years of the project, there will be more congressional will to complete the project with increased levels of appropriation near the project end. Rather than a flattening in the mid years, the schedule may be modified in the future to reflect a gradual increase in appropriations from the \$19,156,000 level to an ending not as great as the \$35,120,000 level shown for FY 2011.

The intake and water treatment plant would be completed by FY 2005. Segments of the project beyond the water treatment plant and their year(s) of construction are shown from left to right across the table. Again, the presentation is only illustrative and represents one of many scenarios for logical construction of pipeline from the treatment plant to the far ends of the project. The object will be to build the project East, West and North from the water treatment plant in a manner that will serve the most people at the earliest date.

In general, pipeline segments will not be built at distance from the water treatment plant until the sequential construction of pipelines have been completed. Exceptions will be possible, however. Exigent conditions in the communities of Medicine Lake in the Dry Prairie area and at Fort Kipp on the Fort Peck Indian Reservation require interim construction projects that will precede the construction of the main transmission system from the water treatment plant to these communities of need. In the case of Fort Kipp, an interim water treatment plant is contemplated that will provide the community with a significant improvement in water quality. As soon as water is available from the regional project,

| TABLE 8-1 | | | | | | | | | | | | | | | |
|--|-------------|----------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|--|--|
| CONSTRUCTION SCHEDULE | | | | | | | | | | | | | | | |
| FORT PECK ASSINIBOINE SIOUX MRI SYSTEM/DRY PRAIRIE RWS | | | | | | | | | | | | | | | |
| Segment | Total Cost | Fort Peck/ Dry Prair | 2,002 | 2,003 | 2,004 | 2,005 | 2,006 | 2,007 | 2,008 | 2,009 | 2,010 | 2,011 | Total | | |
| Intake | 2,880,000 | Fort Peck | | 2,880,000 | | | | | | | | | 2,880,000 | | |
| Treatment Plant | 16,734,000 | Fort Peck | | 814,000 | 11,161,000 | 4,759,000 | | | | | | | 16,734,000 | | |
| Poplar to Big Muddy | 22,681,000 | Fort Peck | | | | 4,515,000 | 6,894,000 | 10,310,000 | 962,000 | | | | 22,681,000 | | |
| Big Muddy to Plentywood | 19,433,000 | Dry Prair | | | | | | | 4,023,000 | 6,104,000 | 9,306,000 | | 19,433,000 | | |
| Highway 13 to FP Boundary | 9,247,000 | Fort Peck | | | | | | | 4,024,000 | 5,223,000 | | | 9,247,000 | | |
| FP Boundary to Scobey | 4,025,000 | Dry Prair | | | | | | | | | 860,000 | 3,165,000 | 4,025,000 | | |
| Scobey to Plentywood | 9,838,000 | Dry Prair | | | | | | | | | | 9,838,000 | 9,838,000 | | |
| Scobey to Opheim | 7,945,000 | Dry Prair | | | | | | | | | | 7,945,000 | 7,945,000 | | |
| Poplar to Wolf Point | 14,889,000 | Fort Peck | | | | 4,515,000 | 6,895,000 | 3,479,000 | | | | | 14,889,000 | | |
| Wolf Point to Porcupine Ck | 25,301,000 | Fort Peck | | | | | | | 4,024,000 | 6,103,000 | 15,174,000 | 0 | 25,301,000 | | |
| Porcupine Creek to Glasgow | 3,874,000 | Dry Prair | | | | | | | | | | 3,874,000 | 3,874,000 | | |
| Glasgow to Opheim | 3,506,000 | Dry Prair | | | | | | | | | | 3,506,000 | 3,506,000 | | |
| FP OM Buildings | 1,000,000 | Fort Peck | | | | | | | 250,000 | 250,000 | 250,000 | 250,000 | 1,000,000 | | |
| DP OM Buildings | 500,000 | Dry Prair | | | | | | | 125,000 | 125,000 | 125,000 | 125,000 | 500,000 | | |
| FP Electrical, Meters, Easement | 4,164,000 | Fort Peck | | | | 595,000 | 595,000 | 595,000 | 595,000 | 595,000 | 595,000 | 594,000 | 4,164,000 | | |
| DP Electrical, Meters, Easement | 3,521,000 | Dry Prair | | | | 503,000 | 503,000 | 503,000 | 503,000 | 503,000 | 503,000 | 503,000 | 3,521,000 | | |
| Planning, Design, Admin | | | | | | | | | | | | | | | |
| Fort Peck | 27,397,000 | Fort Peck | 3,143,000 | 1,044,000 | 3,156,000 | 4,067,000 | 4,067,000 | 4,067,000 | 2,786,000 | 2,394,000 | 2,434,000 | 239,000 | 27,397,000 | | |
| Dry Prairie | 14,626,000 | Dry Prair | 50,000 | 51,000 | 50,000 | 202,000 | 202,000 | 202,000 | 1,864,000 | 2,648,000 | 4,276,000 | 5,081,000 | 14,626,000 | | |
| Total | 191,561,000 | -- | 3,193,000 | 4,789,000 | 14,367,000 | 19,156,000 | 19,156,000 | 19,156,000 | 19,156,000 | 23,945,000 | 33,523,000 | 35,120,000 | 191,561,000 | | |
| Check on Total | | | 3,193,000 | 4,789,000 | 14,367,000 | 19,156,000 | 19,156,000 | 19,156,000 | 19,156,000 | 23,945,000 | 33,523,000 | 35,120,000 | 191,561,000 | | |
| Present Value (PV) | | | 3,070,000 | 4,428,000 | 12,772,000 | 16,375,000 | 15,745,000 | 15,139,000 | 14,557,000 | 17,496,000 | 23,553,000 | 23,726,000 | 146,861,000 | | |
| Federal FPAS/DP Construction | 175,417,000 | -- | 3,181,000 | 4,777,000 | 14,355,000 | 18,987,000 | 18,987,000 | 18,987,000 | 17,592,000 | 21,694,000 | 29,906,000 | 26,951,000 | 175,417,000 | | |
| Fort Peck | 124,293,000 | -- | 3,143,000 | 4,738,000 | 14,317,000 | 18,451,000 | 18,451,000 | 18,451,000 | 12,641,000 | 14,565,000 | 18,453,000 | 1,083,000 | 124,293,000 | | |
| PV Fort Peck | | | 3,022,000 | 4,381,000 | 12,728,000 | 15,772,000 | 15,165,000 | 14,582,000 | 9,606,000 | 10,643,000 | 12,965,000 | 732,000 | 99,596,000 | | |
| Dry Prairie | 51,124,000 | -- | 38,000 | 39,000 | 38,000 | 536,000 | 536,000 | 536,000 | 4,951,000 | 7,129,000 | 11,453,000 | 25,868,000 | 51,124,000 | | |
| PV Dry Prairie | | | 37,000 | 36,000 | 34,000 | 458,000 | 441,000 | 424,000 | 3,762,000 | 5,209,000 | 8,047,000 | 17,475,000 | 35,923,000 | | |
| Total | 175,417,000 | | 3,181,000 | 4,777,000 | 14,355,000 | 18,987,000 | 18,987,000 | 18,987,000 | 17,592,000 | 21,694,000 | 29,906,000 | 26,951,000 | 175,417,000 | | |
| PV Total | | | 3,059,000 | 4,417,000 | 12,762,000 | 16,230,000 | 15,606,000 | 15,006,000 | 13,368,000 | 15,852,000 | 21,012,000 | 18,207,000 | 135,519,000 | | |
| Local (Dry Prairie) | 8,072,000 | -- | 6,000 | 6,000 | 6,000 | 84,500 | 84,500 | 84,500 | 782,000 | 1,125,500 | 1,808,500 | 4,084,500 | 8,072,000 | | |
| State (Dry Prairie) | 8,072,000 | -- | 6,000 | 6,000 | 6,000 | 84,500 | 84,500 | 84,500 | 782,000 | 1,125,500 | 1,808,500 | 4,084,500 | 8,072,000 | | |
| PV Dry Prairie (Non-federal) | | | 6,000 | 6,000 | 5,000 | 72,000 | 69,000 | 67,000 | 594,000 | 822,000 | 1,271,000 | 2,759,000 | 5,671,000 | | |
| Fort Peck OMR Costs | | | 0 | 33,000 | 83,000 | 233,000 | 432,000 | 632,000 | 831,000 | 1,031,000 | 1,280,000 | 1,629,000 | 1,995,000 | | |
| Dry Prairie OMR Costs | | | 23,650 | 58,342 | 160,019 | 296,007 | 429,599 | 560,884 | 715,028 | 909,907 | 1,186,649 | 1,548,000 | 1,548,000 | | |
| PV Fort Peck OMR Costs | | | 0 | 31,000 | 74,000 | 199,000 | 355,000 | 499,000 | 631,000 | 753,000 | 899,000 | 1,100,000 | 4,541,000 | | |
| PV Dry Prairie OMR Costs | | | 23,000 | 54,000 | 142,000 | 253,000 | 353,000 | 443,000 | 543,000 | 665,000 | 834,000 | 1,046,000 | 4,356,000 | | |

the interim water treatment plant will be discontinued. In the case of Medicine Lake, a pipeline will be constructed from Culbertson where the existing water treatment plant has sufficient capacity to supply Medicine Lake until the regional project reaches Culbertson. At that time the Culbertson water treatment plant will no longer be necessary for either Medicine Lake or Culbertson. The interim pipeline between these communities will be designed with pressure and capacity needed for the regional facility between Culbertson and Plentywood.

These latter examples serve to demonstrate the intended flexibility of the construction schedule that will be adjusted by the Tribes and Dry Prairie on an annual basis to best meet their needs, given the level of appropriations that is actually achieved to meet the funding requirements set forth in Table 8-1.

In the bottom half of Table 8-1, the total construction funding requirement is divided into the funding for both the Assiniboine and Sioux and Dry Prairie Rural water systems. For example in FY 2004, total funding of \$19,156,000 is programmed for construction, including noncontract costs. This would include \$4,759,000 for completion of the water treatment plant, \$4,515,000 for the first of four years for the Poplar to Big Muddy pipeline project, \$4,515,000 for the first of three years of the Poplar to Wolf Point pipeline project and smaller amounts for easements, electrical improvements in the rural electric cooperatives and installation of meters. Noncontract costs would total \$4,067,000 for the Assiniboine and Sioux system and \$202,000 for the Dry Prairie system.

Of the total funding needed in FY 2004, \$18,987,000 would be federal, of which \$18,451,000 would be for the Assiniboine and Sioux system and \$536,000 would be for Dry Prairie. The present value of federal funding would be \$16,230,000 as shown in Table 8-1. Dry Prairie would receive an additional \$84,500 from local sources and an additional \$84,500 in matching funds from the State of Montana. The non-federal funding in the example of Table 8-1 assumes that local and State contributions would be at a rate equal to 12%, respectively, of the federal contribution in each year. This would not be necessary as long as the local and state contributions at the end of the construction period are equal to the respective 12% shares contemplated by the authorizing federal legislation and applicable Montana statutes enacted for regional water projects.

8.2 Scheduling of OMR Costs

Chapter 9 summarizes estimates of annual operation, maintenance and replacement (OMR) costs when the project is operating at design capacity and all facilities have been constructed. Table 8-1 provides annual estimates of the OMR costs for the Assiniboine and Sioux and Dry Prairie systems during the construction period. The full amount of OMR expenditure is presented in the "total" column: \$1,995,000 for the Assiniboine and Sioux and \$1,548,000 for Dry Prairie.

By year 2011 the level of OMR funding requirements are projected at \$1,629,000 on the Reservation and \$1,548,000 in the Dry Prairie service area. By year 2010, the Tribes will not be serving the full design population, and OMR costs will not have reached the estimated level projected

for the design population (\$1,995,000 annually). Design of the Dry Prairie system was based on a population that is not expanding. Therefore, by year 2010, when the project is fully operational, the full or ultimate OMR cost level for the Dry Prairie service area is expected.

The annual OMR costs for the Assiniboine and Sioux system is shown in FY 2003 at \$33,000 and increases steadily throughout the construction years. A similar projection is shown for Dry Prairie.

Funds for OMR on the Reservation be derived from congressional appropriations. Funds for OMR of Dry Prairie facilities will be derived from the the local water users.

Total federal appropriations during the construction years will include the construction funding needs for both the Tribes and Dry Prairie and the OMR funding needs of the Tribes. For example, in year 2011, total federal appropriations (illustrative only) of \$26,951,000 will be needed for construction and \$1,629,000 will be needed for OMR (Table 8-1).

8.3 Activities in Advance of Each Year's Construction

Table 8-2 provides a hypothetical schedule of activities in advance of the start of construction on the annual work plan for a pipeline segment or combination of segments. The schedule is intended to list typical activities, including those along the critical path and those that have more latitude for starting and ending times. In general the activities are listed in order of progression. The schedule provides for 15 months of design level activities with starting point in February of the first-year and ending point on May 1 of the following year. May 1 is intended to represent a typical start to the construction season. Clearly, in some years, the construction season could begin earlier.

This illustrative schedule can be shortened on the front end of the activities, ending with the submission of plans and specifications to the Bureau of Reclamation for review. Less room for adjustment is available from the start of Reclamation review to the notice to proceed, shown as a period of six months. This might be compressed to four months.

8.3.1 Preliminary Route

The first step in the list of activities is the establishment of a preliminary route based on field investigations by the design engineer and easement personnel. This would involve an examination of construction conditions on one side of a highway or road to compare with conditions on the other side. Land ownership and potential for acquiring easements would likewise be evaluated. The design engineer and the easement staff would agree on a proposed route, and pipeline alignment and pump station and reservoir locations would be overlaid on a map of land ownership. This step could normally be completed in the field in a week's time followed by preparation of the necessary maps. A total of 30 days was allocated for this activity (Table 8-2).

| TABLE 8-2 | | | | | | | | | | | | | | | | | |
|--|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| ILLUSTRATIVE SCHEDULE OF ACTIVITIES IN ADVANCE OF CONSTRUCTION START | | | | | | | | | | | | | | | | | |
| Months | | | | | | | | | | | | | | | | | |
| Activity | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | |
| Establish Preliminary Route | → | | | | | | | | | | | | | | | | |
| Permission to Survey | | → | | | | | | | | | | | | | | | |
| Easement Acquisition | | | → | | | | | | | | | | | | | | |
| Engineering Survey and Investigations | | | | → | | | | | | | | | | | | | |
| Cultural Resource Surveys | | | | → | | | | | | | | | | | | | |
| Hazardous Waste Surveys | | | | → | | | | | | | | | | | | | |
| Permitting | | | | | | | | | | | | | | | | | |
| Design | | | | | | | | | | | | | | | | | |
| Reclamation Review | | | | | | | | | | | | | | | | | |
| Amend Plans and Advertisement for Bid | | | | | | | | | | | | | | | | | |
| Bid Opening | | | | | | | | | | | | | | | | | |
| Notice of Award | | | | | | | | | | | | | | | | | |
| Notice to Proceed | | | | | | | | | | | | | | | | | |
| Schedule | | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,002 | 2,003 | 2,003 | 2,003 | 2,003 | 2,003 |
| | | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | |

8.3.2 Permission to Survey and Easement Acquisition: Fort Peck Indian Reservation

Permission to survey is the next activity to be undertaken. This step is the prerequisite to the start of (1) design surveys necessary to develop final plans and specifications, (2) cultural resource surveys, (3) hazardous-waste surveys and (4) any additional field work needed for design or environmental compliance. This step is also the initial phase of easement acquisition.

Federal regulations require consent of landowners to conduct surveys on individually owned or tribal trust lands or on government owned lands within the Fort Peck Indian Reservation (or on any Indian Reservation). A written application must be filed with the Secretary (of Interior) specifying the length and width of the easement. The Fort Peck Assiniboine and Sioux Tribes can be granted a waiver by the Secretary on the deposit of funds for estimated damages to property, provided the Tribes agree to pay damages, if any, in a timely manner¹. The application for easement must contain executed stipulations agreeing to construct and maintain the easement in a workman-like manner; to promptly pay all damages caused by survey, construction or operation and maintenance; to restore lands as nearly as possible to their original condition; to take protective measures to conserve soil and other resources, including weed control; to build and repair driveways, roads, fences that may be damaged by construction work and to provide alternative access during construction; and to ensure that the project will not interfere with the use of lands by the landowner for any purpose not related to the primary purpose of the easement².

On the Fort Peck Indian Reservation, maps are required as part of the application for easement. A separate map is required for each 20 miles of easement. The scale of the map should be 2,000 feet to 1 inch. The maps must show the boundaries of all allotted (individual Indian owned) lands with tract number and all tribal lands included in the easement. Sections, townships and ranges must also be provided³. Field notes of the survey are to be shown on the maps or on separate filings. One or more ties to public survey lines must be given for each map sheet⁴. The end of the pipeline route shall be fixed by reference to course and distance to the nearest existing corner of a public survey with an engineer's affidavit and certificate to show these connections⁵. An affidavit must be executed by the engineer who made the survey, and a certificate must be executed by the applicant. Both must certify to the accuracy of the survey and maps for each project segment to be included in a construction contract⁶.

¹ 25 CFR 169.4, Permission to Survey.

² 25 CFR 169.5, Application for Right-of-Way.

³ 25 CFR 169.6, Maps.

⁴ 25 CFR 169.7, Field Notes.

⁵ 25 CFR 169.8, Public Survey.

⁶ 25 CFR 169.11, Affidavit and Certificate.

The consideration for any easement shall not be less than the fair market value of the easement, including damages, if any. The Secretary must advise the landowners of the appraisal and assist the landowners in negotiations with project staff for easements⁷. If the original grant of easement is modified, amended maps and field notes of the new location must be filed with the consent of the landowner⁸. All easements for water treatment plants, water control facilities, public utility pipelines (including pumping stations and appurtenant facilities) may be granted for a term of years without limitation⁹.

An agreement between the project and a landowner must be executed before any work by the project to construct service lines across allotted lands where a service line is for the purpose of supplying the landowner with water. All agreements must be executed before construction. The agreement requires an attached map showing the location, size and extent of the pipeline. The executed agreement must be filed with the Secretary within 30 days of its execution¹⁰.

Widths of easements for pipelines will be decided during project implementation. During construction, transmission line easement widths of 75 to 100 feet and distribution and service line easements of 50 feet will be sought. Permanent easements for operation and maintenance of 35 to 50 feet will be sought.

Purchase of lands, rather than acquisition of easements, will be sought for above-ground facilities, such as the intake, water treatment plant (and related facilities), pumping stations, buildings and reservoirs. As a matter of project policy leases will not be considered for either pipeline easements or above-ground facilities.

The acquisition of lands and easements described in this section is a major task. The requirements of the task are made more difficult by the fact that many of the allotted (individually owned Indian) lands have multiple owners stemming from the conveyance of property from one generation to the heirs of successive generations. Allotted lands with more than 50 owners is not uncommon. Permission to survey and an easement can be granted by the Secretary with the consent of the individual Indian owners when a majority of the interests consent to the grant. For example, with the consent of 26 heirs, an easement across lands owned by 50 individuals can be granted.

⁷ 25 CFR 169.12, Consideration for Right-Of Way Grants.

⁸ 25 CFR 169.17, Change of Location.

⁹ 25 CFR 169.18, Tenure of Approved Right-of-Way Grants.

¹⁰ 25 CFR 169.22, Service Lines.

Table 8-2 provides an eight-month period for the acquisition of permissions to survey and easements. As stated above, the permission to survey must be acquired prior to entry on the land to collect information to obtain easements, and easements must be acquired before the start of construction. In theory, the 15 month schedule could be shortened to nine months if the end of the easement process coincided with the start of construction. As shown, however, six months are provided between the end of the easement process and the start construction. This is intended to draw attention to the fact that final design and the easement process depend upon one another and adjustments are necessary in both for a satisfactory conclusion. Often the preliminary route selection, based on preliminary design preferences and preliminary knowledge of landowners' willingness to grant easements, will require adjustment to reflect a previously unknown design problem or an unwilling landowner. If a route change is necessary, the process used for the preliminary routing must be repeated for the adjusted, final route. It is preferable if the easement process has been nearly completed by the time that the plans and specifications have been submitted by the design engineer to the Bureau of Reclamation for review. If the easement process is timed to more closely coincide with the start construction, difficulties in obtaining easements may delay the start of construction.

Private or fee lands on the Fort Peck Indian Reservation will be treated in the same manner as individual Indian, tribal and government lands, although the process is not required by federal regulation.

8.3.3 Permission to Survey and Easement Acquisition: Dry Prairie

The same activities of acquiring permissions to survey and easement acquisitions on private lands in Dry Prairie are less formal and subject to less regulation than on the Fort Peck Indian Reservation. Dry Prairie will establish its own formal policy for acquiring permissions to survey and acquiring easements from private landowners, subject to the requirements of the respective county clerks and Montana law governing surveys for easements. Dry Prairie contemplates donation easements on private lands crossed by the project.

It would be possible, for example, for Dry Prairie to specify a legal description of considerable width, say a quarter of a mile, to be agreed upon between the landowner and filed with the county, as a preliminary easement. This preliminary easement could specify a construction width of 50 to 100 feet and a permanent width of 35 to 50 feet or as agreed between the landowner and Dry Prairie. A final easement could be filed with the county and the landowner after construction based on actual locations determined by global positioning system (GPS) methods that would accurately locate the final easement within the original, preliminary broader band.

Procedures for permission to survey and easements would be more rigorous and would more closely parallel the procedures on the Fort Peck Indian Reservation where lands owned by the State of Montana or federal lands are needed for project construction. The only simplification in these cases would be that of a single, rather than multiple, landowners. State lands will require rigorous environmental and cultural resource field reviews for each tract of land requiring easement. State lands

are primarily located in Daniels County in the northeast quadrant of the project. Construction will be undertaken in that quadrant of the project in the later years of the construction schedule. Easements on State and any federal lands in the Dry Prairie area will be acquired at fair market value or as negotiated.

In the case of both the Fort Peck Tribes and Dry Prairie, the administrative staff requirements and costs presented in Chapter 7 for easement acquisition reflect the relative differences in level of effort required in the respective project areas.

8.3.4 Surveys and Investigations for Engineering, Cultural Resource and Hazardous Waste Purposes

Table 8-2 presents a period of 1 to 2.5 months for these categories of activities. The activities require access to land ownership in the project and follow grants of permission to conduct surveys. Engineering surveys and investigations include routing of pipelines, siting of above ground facilities, GPS and other surveys to establish precise locations, and geotechnical investigations to determine subsurface conditions for construction of foundations.

Class III cultural resource investigations and hazardous waste surveys are field investigations needed to comply with environmental commitments in advance of construction.

8.3.5 Permitting

Permitting will be required for stream, highway and railroad crossings, among other types of permitting. This activity will require the completion of cultural resource and hazardous waste surveys, as well as substantial completion of design. The project will acquire most permits, and the process will become reasonably routine as the affected agencies and project staff gain experience with the several applications for permits. A period of 90 days is included in the illustrative schedule for the processing of permits after the completion of an application for permit.

8.3.6 Design, Design Review and Plan Amendment

Design is scheduled for a five-month period, followed by two months of review by the Bureau of Reclamation and an additional six weeks to respond to the comments from the Bureau of Reclamation review, re-submission of the plans and specifications and release of an advertisement for competitive bids. At the time of submission of plans and specifications to the Bureau of Reclamation for review, the design will be 90% to 95% complete. The design engineer will respond to all Bureau of Reclamation review comments. Appropriate changes will be made, and the plans and specifications will be resubmitted to the Bureau of Reclamation for final approval.

8.3.7 Period of Advertisement, Bid Opening, Notice of Award and Notice to Proceed

With the plans 100% complete and approved, an advertisement for bids will be made with a 30 to 45 day timeframe available for contractors to prepare their price proposals in conformity with the plans and specifications. A pre-bid meeting will be held during the advertisement period to provide contractors with the opportunity to clarify questions they may have with regard to the plans and specifications. Following the advertisement, a bid opening will be held. This would be at the end of month 13 in Table 8-2. Project staff would then evaluate bids to check the accuracy of the bid proposals and to evaluate qualifications of the apparent low bidder. A one-month timeframe is provided in the schedule, but in most cases a week or ten days would be adequate. The one-month timeframe is not unreasonable, however, because the owner may require time to schedule a meeting with individuals or boards responsible for policy decisions, such as the approval for a notice of contractor award. Project staff will submit its recommendations for award to Bureau of Reclamation.

When the successful bidder has been identified and policy decisions and approvals are complete, a notice of award will be issued that will require the successful contractor to produce documents in support of the bid, including necessary certifications and representations, literature from manufacturers and other materials. Following review and approval of the submissions, construction contract agreements can be executed by both the owner and the contractor. A notice to proceed with construction can then be issued.