OFFICE OF THE CITY CLERK

CITY OF OAKLAND

TO: Office of the City Administrator

ATTN: Deborah Edgerly

FROM: Community and Economic Development Agency

DATE: July 8, 2008

RE: Informational Report on the Functions and Processes of the Project Delivery

Division of the Design and Construction Services Department

SUMMARY

At the May 13, 2008, Public Works Committee meeting, the Committee requested an informational report describing the functions and processes of the Project Delivery Division of the Design and Construction Services Department. This informational report outlines the various tasks, procedures, tools, and guidelines that the Project Delivery Division utilizes to implement capital construction projects. Additionally, some of the challenges that face the division as well as some of the ongoing efforts for improvements are described in the report.

FISCAL IMPACT

This is an informational report and therefore there are no fiscal impacts.

PROGRAM DESCRIPTION

Mission

The mission of the Project Delivery Division is to manage and implement capital projects in a professional, comprehensive, efficient, and cost effective manner. These projects serve the community and city employees by providing expanded and modernized facilities, increased comfort and safety, improved access for the disabled, improved storm and sewer services, street beautification, and improved traffic and pedestrian safety.

Functions

Below are the key functions of Project Delivery Division:

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- Manage projects from planning through completion of construction, except for engineering projects
- Manage construction of all capital projects
- Manage grant applications and reimbursements for parks and recreation projects
- Work closely with the Office of Parks and Recreation and the City Council to plan and prioritize future parks capital projects

Processes

Throughout the industry, projects are considered to have five general phases. They are: Planning, Design, Bid and Award, Construction, and Post-Construction. The major activities necessary to ensure successful delivery of a project in each phase, are as follows:

Planning

- Scoping & Programming with Client
- Establish Preliminary Budget and Schedule
- Execute Project Agreement with Client
- Prepare RFP and Hire Consultant (if design is not done in-house)
- Community Outreach and Kick-off meeting
- Obtain Preliminary Design Information Such As As-Builts, Utility Maps, Survey Records, Title, and any other information needed to proceed with the design phase.

Design

- Environmental Assessment
- Geotechnical Investigation and Analysis
- CEQA/NEPA Determination
- Regulatory Agencies' Reviews and Permits
- Community Outreach and Design Development
- Design Submittals
- Plans, Specifications & Estimates Review and Approval
- Monitor and Update Schedule and Budget

Bid and Award

- Advertise
- Pre-Bid Meeting
- Prepare Council Report for Contract Award
- Execute Construction Contract
- Pre-Construction Meeting
- Monitor and update Schedule and Budget

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Construction

- Pre-Construction Meeting with the Contractor
- Prepare Daily Reports
- Inspect Work for Compliance with Contract
- Process Submittals, Request for Information, Correspondence
- Prepare Public Relations letters, Act as Community Liaison and Respond to Complaints
- Maintain Project Files, Request for Information, Submittal, and Change Order Logs
- Review, Negotiate, and Process Change Orders
- Prepare Monthly Progress Payments

Post-construction

- Review and Respond to Construction Claims
- Coordinate Final Walkthrough with Client, Engineer/Architect and Maintenance Staff
- Prepare Punchlist and Make Final Inspection
- Collect As-Builts Drawings, Warranties
- Coordinate Training and Ownership Transfer to Client and Maintenance Staff
- Issue Notice of Completion
- Contractor and Consultant Evaluations
- LEED Certification, if applicable
- Final Payment
- Final Grant Reimbursement
- Close Project Budget and Financial System
- Project Archiving

KEY ISSUES

This section provides a list and brief descriptions of the key challenges in delivering capital projects.

<u>Managing Expectations of Clients</u>. At times, it is difficult for some of our clients to understand the costs and time required to deliver a public project. As a result, it is important to manage client expectations, in order to avoid client dissatisfaction. Recent increases in construction costs have limited the scope of planned improvements in some cases.

<u>Workload</u>. The Project Delivery Division has 11 project managers and 13 construction managers. Currently, there are 47 projects with total project costs of \$137M under the Project Management Section and 53 projects with total project costs of \$103M under the Construction Management Section. In Fiscal Year 2007-08, the Project Delivery Division has completed construction of 40 projects with total project costs of \$50M. Since each project manager and construction manager manages multiple projects, staff must prioritize work among their respective projects, sometimes causing some projects to receive less oversight than others.

Non-Control and Coordination of Third Party. Many of our projects require new utility services, such as PG&E and EBMUD, and permits from other Federal, State and Local regulatory agencies. Since the City has no control over these third party agencies, project schedules may be delayed significantly due to their extensive review and approval processes.

<u>Minimize Disruption of the Public During Construction</u>. Construction activities are by their nature disruptive to the public. Trenching, repaving, temporary street closures and other impacts must be managed to the extent possible, balancing the needs of the work with the convenience to the public. (The problem can be compounded when a contractor does not follow the contract requirements.)

<u>Unfunded and Unscheduled Work</u>. In addition to the projects that are funded through the CIP budget process, the Project Delivery Division also manages many mid-year projects that are not scheduled and/or fully funded. Since all of our staff is fully booked and projects funded at the beginning of each two-year budget cycle, these additional projects impact the delivery of other projects.

Continuous Improvements

Staff recognizes the need for the continual assessment and improvement of the services that are provided by the Project Delivery Division. The following items outline some of the efforts being undertaken to improve service delivery.

<u>Project Agreements</u> – Formal agreements are now being executed with our clients before the implementation of capital projects. These agreements help define the project scope of work, schedule, and budget in writing early in the process. A clear understanding of the expectations for the project helps minimize misunderstandings between the client agencies and Project Delivery Division. It also helps identify at an early stage any scope and schedule changes or issues.

<u>Project Tracking Database</u> – Staff has developed an automated computer database to track project information, schedules, and budgets. The database uses financial data from the Oracle financial system so that up-to-date financial information can be obtained to track project budgets and expenditures.

Benchmarking Study on Delivery Costs. For the past 6 years, Oakland has participated in a benchmarking study with 6 other largest California cities to document the soft costs in delivering capital projects and examine over 100 best management practices used in project delivery. Based on the study of 698 projects with an average total construction cost of \$1.5M, Oakland's average total project delivery cost is 36% of the construction cost, which is 2 % lower than the average of all the agencies.

<u>Master Schedules</u> – Staff has created sets of monthly master schedules as a tool to monitor project schedules and budgets in our monthly CIP meeting for the following capital Programs: Parks and Open Space, Buildings and Facilities, Streets & Sidewalks, Sewers & Storm Drains, and Traffic Improvements.

Web Based Project Status Report - The status report of all the current capital projects that are managed by the Design and Construction Services Department has been placed on the web for easy access by our clients and the public.

Web link:

http://www.oaklandnet.com/cedahome_com/SiteData/cedahome/InetPub/wwwroot/main/dcsd_currentprojects.asp

<u>Performance Measures</u> – The City's Performance Measure Standard for the Project Delivery Division is to keep the aggregate construction management cost under 10% of the construction cost, and to keep the aggregate project management cost under 7% of the construction cost, annually. The Project Delivery Division has successfully met these standards in the past years.

<u>Customer Survey</u> – In order to understand how to improve services and to see where improvements may be necessary, the Project Delivery Division issued a customer survey to the Redevelopment Agency, the Fire Department, the Police Department, Parks and Recreation, the Library, the Oakland Zoo, and the Oakland Museum. Using a scale of 1 (not satisfied) to 5 (very satisfied), an average score of 4.2 was given (3 being satisfied). Additional feedback will be solicited from client agencies to specifically determine how services can be improved.

SUSTAINABLE OPPORTUNITIES

This is an informational report only and there are no direct provisions related to sustainable opportunities.

DISABILITY AND SENIOR CITIZEN ACCESS

This is an informational report only and there are no direct impacts related to access issues.

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ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the Council accept this informational report.

Respectfully submitted,

Dan Lindheim

Director

Community & Economic Development Agency

Reviewed by:

Michael J. Neary, P.E.

Deputy Director, Community & Economic Development Agency

Prepared by:

David Lau, P.E.

Division Manager, Project Delivery Division

APPROVED AND FORWARDED TO THE PUBLIC WORKS COMMITTEE:

Office of the City Administrator

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Community & Economic Development Agency Design and Construction Services Department Project Delivery Division

Project Delivery Presentation To Public Works Committee

What We DOP

- Manage projects from planning through completion of construction except for engineering projects
- Manage construction of all capital projects
- Manage grant application and reimbursement for park and recreation projects
- Work closely with OPR to plan and prioritize for future parks capital projects

Phases of a Capital Improvement Project

- Planning
- ⇒ Design
- ⇒ Bid/Award
- Construction
- ⇒ Post-Construction

Planning Phase

- Scoping & Programming with Client
- Establish Preliminary Budget and Schedule
- Execute Project Agreement with Client
- ⇒ Prepare RFP and Hire Consultant
- Community Outreach and Kick-off meeting
- ⇒ Obtain Preliminary Design Information Such As As-Builts, Utility Maps, Survey Records, Title, etc
- **⇒** Conceptual Design

Design Phase

- ⇒ Environmental Assessment
- Geotechnical Analysis
- ⇒ CEQA/NEPA Determination
- Regulatory Agency's Reviews and Permits
- Community Outreach and Design Development
- Monitor and Update Schedule and Budget
- Design Submittals
- ⇒ Plans, Specifications & Estimates Review and Approval

Bid and Award Phase

- ⇒ Advertise
- ⇒ Pre-Bid Meeting
- ⇒ Prepare Council Report for Contract Award
- **⇒** Execute Construction Contract
- ⇒ Pre-Construction Meeting

Construction Phase

- Prepare Daily Reports
- Inspect Work for Compliance with Contract
- ⇒ Process Submittals, Request for Information, Correspondences
- Prepare PR letter, Act as Community Liaison and Respond to Complaints
- Maintain Project Files, RFI, Submittal, and Change Order Logs
- ⇒ Review, Negotiate, and Process Change Orders
- Prepare Monthly Progress Payments
- Review and Respond to Construction Claims
- Coordinate Final Walkthrough with Client, Engineer/Architect and Maintenance Staff
- Prepare Punchlist and Make Final Inspection
- Collect As-Builts Drawings, Warranties
- Coordinate Training and Ownership Transfer to Client and Maintenance Staff
- Issue Notice of Completion

Post-Construction Phase

- Contractor and Consultant Evaluations
- ⇒ LEED Certification
- Final Payment
- ⇒ Final Grant Reimbursement
- Close Project Budget and Financial System
- Project Archiving

Completed Projects FY 07-08

- → Total Number of Projects
- → Total Project Costs

Current Projects

- ⇒ Total Number of Projects
- ⇒ No. of Projects/Amount per Staff

Challenges

- Managing Expectations of Clients
- ⇒ Workload
- ⇒ Non-Control and Coordination of Third Party Issues (i.e. Utilities, Regulatory Agencies)
- → Minimize Disruption to Public During Construction
- ⇒ Manage Scope Changes During Construction
- Unfunded and Unscheduled Work

Continuous Improvements

- Project Agreements
- Project Tracking Database
- Benchmarking Study on Delivery Costs
- → Master Schedules
- Web Based Project Status Report
- → Performance Measures
- Customer Survey

Questions/Discussion