## **CITY AND COUNTY OF DENVER**



**Department of Public Works** 

Right-of-Way Engineering Services **Project Control Office** 

201 W. Colfax Avenue, Dept. 507 Denver, CO 80202 720-913-4501

| Capital Project Engineering Plan (CPEP) Review Submittal Checklist |  |  |  |  |
|--|--|--|--|--|
| Purpose  | Controls Office (P<br>projects being rel<br>submission of cor<br>design document | Engineering Plan (CPEP) Review is performed by the Public Works Project WPCO) to ensure internal quality and regulatory review prior to City eased for Construction Bid. A typical CPEP Review process requires inplete transportation, wastewater, erosion control, utility and material including Plans, Reports, and Specifications. It is intended that the ill serve as the set of documents used for construction bidding. |  |  |
|  |  | ust be completed and Project approved by the PWPCO via Public Works ior to a Capital Project being released for advertisement.   |  |  |
|  | document. Other  | ntain, at a minimum, the items listed in this Review Submittal Checklist wise, they may be considered incomplete and the project review may be note that small scope/ scale projects may not qualify for all requirements.   |  |  |
| Questions & Project Guidance                                       | Distribution Proce<br>Transportation Re<br>REGION MAP\PCO F                      | arding a specific project, these Checklist requirements, or the Plan ess, please contact your PWPCO Case Manager, who by default is the eview Engineer (\\pwsfs00\agencies\PWPCO\Shared\PCO PROCEDURES\PCO Region Map.pdf) assigned to the City region where the project is located.   |  |  |
| CPEP Review  |  | summary of suggested CPEP Review cycles to assist the Project Manager  |  |  |
| Cycle Summary  |  | CPEP Plan submittal process. The Project Manager (PM) may contact the  |  |  |
|  | assigned PWPCO   | Case Manager to consult on which steps are applicable to the project.  |  |  |
|  | COTED 4  |  |  |  |
|  | STEP 1:  | Prior to initiating project design, the PM should route the proposed   |  |  |
|  | Project<br>Inception   | project Scope to internal and external agency reviewers to announce the project and assist in preliminary identification of design matters that  |  |  |
|  | Пісерион   | could benefit the project design scope. The Project Manager is prompted  |  |  |
|  | Highly   | at time of new PMP approval to prepare a Project Inception review.   |  |  |
|  | Recommended  | Total review cycle period to receive report: 8 Working Days  |  |  |
|  | STEP 2:  | If/ when applicable, concept Plan drawings should be submitted for   |  |  |
|  | Concept Plan   | internal and external agency review. A more complex project will benefit   |  |  |
|  | 30%  | from a Concept Plan Review by identifying critical design elements as  |  |  |
|  | (CDOT FIR)   | early as possible in the design effort.  |  |  |
|  | Recommended  | Total review cycle period to receive report: 15 Working Days   |  |  |
|  | STEP 3:  | Considered the first significant project review phase, the 60% Design  |  |  |
|  | 60%  | Review is typically distributed to all applicable internal and external  |  |  |
|  | Required -N/A  | agency review agents to solicit a comprehensive project review. A draft  |  |  |
|  | if FIR in Step 2   | version of the Technical Specifications should be included at this step.   |  |  |
|  |  | Total review cycle period to receive report: 15 Working Days min   |  |  |
|  | STEP 4:  | This follow up review phase serves as the 2 <sup>nd</sup> opportunity for internal and   |  |  |
|  | 90%  | external review agents to perform a detailed review of project design  |  |  |
|  | (CDOT FOR)   | elements and verify responses to previous comments.  |  |  |
|  | Required STEP 5:   | Total review cycle period to receive report: 15 Working Days   |  |  |
|  |  | All residual comments from the 90% Design review must be addressed in a final reviewer check called Final / Const Plan Review. This shortened  |  |  |
|  | Final/ Const<br>  Plan   | review cycle is to verify final compliance and clear up any outstanding  |  |  |
|  | Required if any  | design items prior to authorizing project for Construction Bid.  |  |  |
|  | review denials   | Total review cycle period to receive report: 8 Working Days  |  |  |
|  | STEP 6:  | Final approved CPEP documents, final sign offs, and remaining required   |  |  |
|  | Submit for   | construction bid documents shall be submitted to PWPCO Case Manager  |  |  |
|  | Const. Bid   | for completeness check and to forward to PW Contracts Admin to begin   |  |  |
|  |  | Construction Bid process.  |  |  |
|  | Required   | Total review cycle period to receive report: 1 Working Day   |  |  |



## **CPEP Submittal** All CPEP submittals must be logged in for PCO review by the PW Electronic Plan Distribution Process. All Process documents/ instructions are located in the following shared folder Process location: \pwsfs00\agencies\PWPCO\Shared\PCO PROCEDURES\PCO PLAN SUBMITTAL PROCEDURE Instructions on how to submit a CPEP for each Review cycle can be found in the document: "Plan Review Distribution Procedure.pdf" > The required log in Worksheet is titled "PILAR Distribution PM Worksheet.xls" Instructions for use of the City FTP system can be found in the "Plan Review Distribution Procedure.pdf" \* PUBLIC WORKS APPROVAL OF A CPEP EXPIRES 2 YEARS FROM DATE OF APPROVAL \* Please note: Due to technical limitations, Xcel Energy is not able to participate in the City's Electronic Review system. Therefore, to allow for Xcel Energy to review your project documents, the PM must submit an Xcel Energy Work Request form followed by hard copy of plans for each submittal directly to Xcel Energy. To coordinate this effort, contact Gia Pham (gia.pham@denvergov.org) of the PWPCO office to obtain a Work Request form. Once transmitted to Xcel, please forward an electronic copy of Work Request form to Gia Pham of PWPCO Office for recordation purposes. CPEP Plan Capital Project Engineering Plans shall include the following: Requirements 1. Applicable to all Sheets / Submittal cycles: □ Electronic plan file(s) scaled to so they can be printed to 11"x17" print format. Plan sheets signed and stamped by a Professional Engineer registered with the State of Colorado (final construction plans only) (does not apply to plans prepared inhouse) ☐ Official Project name and applicable Project numbers □ Keymaps shall be provided on applicable plan sheets if multiple sheets are required to show the entire site □ Numerical and bar scales & north arrow on all plan sheets □ Linetype legend on the first sheet of any plan sequence that contains new linetypes 2. Cover Sheet □ Vicinity map (also showing Project Start and End stationing, if applicable) Project name □ Project location (legal description and address) □ PCO Tracking Number prominently displayed (PMP #) ☐ City PILAR Project Number when assigned □ Project Phase (30%, CDOT FIR, 60%, CDOT FOR, 90%, Final for Construction, etc.) □ Tabulation of Length & Design Data □ ¼ Section, Section, Township & Range ■ Plan set date □ Sheet index ☐ City and County of Denver Dept of Public Works Signature Block 3. General Notes & Standard Symbol Sheets (as applicable – some may not required if notes are covered in the specifications or specific Plan sheets) ☐ Legend of Standard Symbols and Linetypes as shown on drawings General Notes as applicable to the respective department, recommended examples of which can be found under "Suggested Plan Notes" Section below Project Plans, Specifications, Permit Notes Survey notes as suggested by the Survey Department (may be on Survey Plans)

Removals, Existing Items, Earthwork & Excavation, Saw cutting Notes (may be on

Utility Notes if applicable for outside Utility agency coordination, including Utility Contact information (may be on Utility, Sanitary and Drainage Plans)

Traffic Control Notes (may be on Construction Phasing Plans)Landscaping Notes and/ or Parks and Recreation Notes

☐ Erosion Control Notes (if not included on Erosion Control Plans).

Demolition/ Removals Plans)

|  | 4. | <ul> <li>Survey Control Plans (specific sheets for larger project or included in Roadway Plans for small-scale project)</li> <li>See the following link for requirements: Land Survey Control Diagram</li> <li>Identify all range points and other survey monuments within disturbed areas that will require search, preservation and/ or re-establishment</li> <li>Ownership and parcel data (as appropriate) (CDOT standards)</li> <li>Benchmark (identified by name, elevation and datum) and Basis of Bearing</li> <li>Statement of linear units</li> </ul>  |
|--|----|--|
|  | 5. | <ul> <li>Demolition / Removals Plans</li> <li>Limits of pavement, sidewalk, concrete &amp; curb and gutter removals</li> <li>Sawcut lines</li> <li>Structures to be removed with adjacent disturbance limits</li> <li>Limits of trenching (and pavement patch) due to utility installation (could be on Roadway Plan)</li> <li>Clearly define existing features near demolition work to be protected/ remain</li> <li>Show existing affected trees, species, and their approximate canopy size</li> <li>Delineation or special notes addressing special environmental mitigation or hazardous waste removals (per CCD Dept of Environmental Health or related study)</li> </ul>  |
| CPEP Plan<br>Requirements<br>(continued) | 6. | <ul> <li>Provide a Typical Section for each consistent-width segment of roadway Show, label and dimension existing and proposed:         <ul> <li>□ Right-of-Way lines</li> <li>□ Curb and gutter</li> <li>□ Sidewalks &amp; landscaping strips</li> <li>□ Travel Lanes- include turn, bike, parking, variable width lanes. Include lane marking widths on 90% set and Final set.</li> <li>□ Pavement Notes including conversion factors/ application rates</li> <li>□ Pavement materials, specific concrete or asphalt types, and thickness (total and suggested lifts).</li> <li>□ Identify pavement design method (MGPEC, CDOT, etc.). MGPEC Pavement Design method information is located in following Shared folder location: \\pwsfs00\agencies\PWPCO\Shared\PROJECT DESIGN RESOURCES\MATERIALS &amp; PAVEMENT\Pavement Design</li> <li>□ Reference to pavement thickness design as applicable.</li> </ul> </li> </ul>   |
|  | 7. | Roadway Plans  Show existing and proposed (label if not per standards or legend):  Right-of-Way lines Curb and gutter Limits of proposed paving Sidewalks Control lines Benchmarks Basis of bearing Sight triangles (including pedestrian, corner, and roadway, as applicable) Street lights Pedestrian lights Pedestrian and vehicular traffic signals Landscaping in the ROW (may be placed on a separate sheet in the CPEP) Pavement markings and traffic signage (if no Signage/ Striping plans provided) Parking meters Nearby driveways and alleys Street names RTD bus stops or light rail tracks/ access points with any amenities including bench/shelter, signage, bus pad and bench pad Surface utility features such as manhole lids, storm drainage inlets, traffic control boxes, fire hydrants Note the existence of any special districts, landmark designations, or park designations. Provide contact information and person(s) familiar with project Railroad crossings, permit numbers and methods of construction through railroad property (boring/ jacking, etc.). Provide contact information. |

|                             | Show, label and dimension existing and proposed:  Rights-of-Way width Easements (include type and width) Temporary Easements (include City Reference Number) Sidewalk width and cross slope* Sidewalk and tree lawn cross slope Curb ramps* Flowline to flowline width Flowline grades (unless shown on profile) Right-of-way to flowline distance Proposed surface impacts (trench widths, etc.) due to underground utility installations. Driveway or alley curb cuts, if any Private curb and gutter transition at property line (if project is reconstructing private accesses) Station and elevation of all curb returns; horizontal PC's, PT's, PCC's, etc. Distance between new and existing drive cuts (edge of flare to edge of flare) Distance between new drive cuts and the flowline of intersecting streets   |
|-----------------------------|--|
| CPEP Plan                   | <ul> <li>□ Distance between street lights and pedestrian lights</li> <li>□ Distance between parking meters</li> <li>□ Distance between street trees</li> <li>□ Slope of the driveway approaching the curb cut (if project is reconstructing existing accesses)</li> <li>□ Proposed on-street parking dimensions</li> <li>□ Encroachments of anything into the ROW covered by an existing or proposed revocable permit.</li> <li>*Include spot elevations and slope labels to show that all pedestrian ramps and sidewalks that are proposed (or existing to remain) meet City and County of Denver and Americans with Disabilities Act standards (ADA).</li> </ul>   |
| Requirements<br>(continued) | 8. Roadway Profile Plans  (Required if constructing or reconstructing at least 100 continuous lineal feet of alley or curb, gutter and/or sidewalk)  Proposed grade at centerline and/or flowline Existing grade (dashed) at centerline and/or flowline Street names on sheet title block Existing and Proposed contour lines, grade points clearly labeled Match lines and consecutive sheet numbers Centerline station of all new or reconstructed driveways and alleys Centerline station of all intersecting roadways Station and elevation of all vertical grade breaks Vertical curves, VPI, VPC, VPT, L, K, high or low point   |
|                             | <ul> <li>9. Intersection Detail Plans (if intersections, ramps, or corner signals proposed)</li> <li>Detailed horizontal design dimensions</li> <li>Intersection grading (contours and grade break spots as appropriate)</li> <li>Include spot elevations and slope labels to show that all pedestrian ramps and sidewalks that are proposed (or existing to remain) meet City and County of Denver and Americans with Disabilities Act (ADA) standards.</li> <li>Curb return profiles</li> <li>Flow direction arrows at all flowlines and grade breaks</li> <li>Signal Design per City Signal Standards, including signal interconnects.</li> <li>Median Design</li> <li>Proposed bulb out design, detailed</li> <li>Detail any centerline, curb line or lane line offsets through intersection</li> <li>Proposed radii and/ or vehicle turning templates for each corner</li> <li>Roundabout Design (as applicable)</li> </ul> |
|                             | <ul> <li>10. Roadway Grading Plans (NOT REQUIRED if all grading information is shown on Profile Plans per Item 8, or Drainage Plans per Item 12)</li> <li>□ Existing and Proposed grading contours</li> <li>□ Spot grades at points of grade change (high, low points) and/ or grade breaks</li> <li>□ Spot grades at corner ramps, driveways, curb returns, and other areas of interest.</li> </ul>   |

|   | 11. Utility Plans   |
|---|---|
|   | □ Provide utility information identifying all utility features in the project area based on   |
|   | surveys, potholing, and information gathered from utility companies   |
|   | ☐ Include utility contact information on first page of Utility Plans  |
|   | □ Show results of field reviews and utility investigations with utility companies, as   |
|   | required, to ensure correct horizontal and vertical utility data  |
|   | ☐ The final utility plans shall include all horizontal and vertical locations of existing and   |
|   | proposed utilities and any other details identifying possible utility conflicts.  |
|   | Label centerline distances between existing and proposed utilities  |
|   | □ Show existing and proposed Denver signal interconnect lines if applicable per TES   |
|   | ☐ In utility profile, show and label existing clear distances from outside of pipe to   |
|   | outside of pipe  Show Hydraulic Grade Lines (HGL) on all Utility plan profiles  |
|   |   |
|   | <ul><li>Show Soil Boring Logs in profile view (if applicable)</li><li>Water main relocation and/ or service line relocation plans (for lead services) shall</li></ul>                   |
|   | meet the criteria of Denver Water. A full plan submittal and review by Denver   |
|   | Water Sales shall be completed for main relocations and lead service lines  |
|   |   |
|   | <ul><li>Label water main size, type, material and date of installation (if applicable)</li><li>Label internal or external water meters if service is affected by construction</li></ul> |
|   | ☐ Identify on Utility Plans who is responsible for relocation of any existing utilities   |
|   | dentity of outlity rians who is responsible for relocation of any existing utilities  |
|   | 12. Sanitary Plans, Drainage Plans & Drainage Study (either integrated with, or   |
|   | separate from Utility Plans per Item 11 above)  |
|   | ☐ If storm or sanitary facilities are proposed for the specific project, sanitary and/ or   |
|   | drainage plans must be incorporated into the overall CPEP package. Sanitary and   |
|   | drainage plans must conform to Section 4 of CCDs "Sanitary Design and Technical   |
|   | Criteria Manual" and CCDs "Storm Drainage and Technical Criteria Manual"  |
|   | ☐ Provide results from Facility Condition Review (FCR) by CCD Public Works  |
|   | Wastewater Management Division for all existing structures or piping within limits of   |
|   | project. Guidance Information: \\pwsfs00\agencies\PWPCO\Shared\PROJECT  |
|   | DESIGN RESOURCES\WMD UTILITY INSPECTION PROCEDURE   |
|   | ☐ If applicable to the specific project, a drainage study must be incorporated into the   |
|   | overall CPEP package. The drainage study must conform to the City's "Storm  |
|   | <u>Drainage and Technical Criteria Manual</u> "   |
| 1 | <ul> <li>Include calculations for street depth flows using UDFCD calculation sheet for</li> </ul>   |
| 1 | Allowable Street Capacity for the minor and major storm event. If street capacity   |
|   | criteria are exceeded in the minor or major storm, identify alternatives or mitigation  |
|   | measures  |
|   | ☐ If applicable to the specific project, permanent water quality treatment must be  |
|   | incorporated into the overall CPEP package. The design of this facility must be   |
|   | incorporated into the drainage study and must conform to the City's "Storm  |
|   | <u>Drainage and Technical Criteria Manual</u> "   |
| ١ | 13. Erosion Control Plans and Water Quality Plans (design review will assist the project  |
| I | in reaching "Permit Ready" Erosion Control Package)   |
|   | ☐ At or before the 60% CPEP submittal cycle, a Stormwater Management Plan (SWMP)  |
|   | shall be submitted that includes both Erosion Control Plans and Narrative document  |
|   | ☐ The Erosion Control Plans shall include existing/ proposed grading, proposed erosion  |
|   | control and water quality measures with applicable general notes & details  |
|   | □ Address all phases of work to prepare site for construction (i.e utility work) in SWMP  |
|   | ☐ The Plans and Narrative submittal must address the requirements of the City's   |
|   | "Construction Activities Stormwater Manual"   |
|   | □ Apply "Required Standard Notes" to the submitted Erosion Control Plans per Section  |
|   | 5 of the <u>Construction Activities Stormwater Manual</u> .   |
|   | Additional documentation may be requested as stated in the Stormwater Manual, if  |
|   | appropriate due to site conditions (for example- Geotechnical study).   |
|   | □ Language indicating status of Erosion Control Plan (For information only, Suggested   |
|   | Plan, Approved for Permit, etc.)  |
|   | , .,  |
|   | 14. Concrete Jointing Plans (if concrete roadway pavement is being constructed)   |
|   | ☐ Show, label and dimension all concrete joints, including spacing. Show typical and  |
|   | non-typical joint spacing both longitudinal and transverse  |
|   | ☐ Show joint type legend, whether CCD (Std. Dwg 5.1), or CDOT (M&S M-412) ☐ Show payement markings in background as a reference for lane lines  |
|   | Show pavement markings in hackground as a reference for lane lines  |

| 15. Si | gnage and Striping Plans   |
|--------|--|
|        | Existing and proposed signage w/ dimensions from Point of Curve Return (PCR) if outside of standards |
|        | Label MUTCD sign designation and panel size  |
| ם נ    | Existing and proposed pavement markings w/ dimensions  |
| ם נ    | Verify pavement marking materials are specified either on plans or specifications                    |
| ם נ    | Lane designation pavement markings   |
| ם נ    | Lane widths  |
| ] [    | Flowline to flowline dimension   |
|        | Station and offset information for all tapers  |
|        | Proposed dimensions for pavement marking symbols including bike lanes                                |
|        | Proposed dimensions for crosswalk markings, stop bars at all signalized                              |
|        | intersections  |
|        | Detail for any special non-standard signs, overhead sign structures, etc.                            |
| 16. Li | ghting Plans (if more than five street lights are proposed)  |
|        | Show all existing and proposed street and pedestrian lights, power sources, conduit,                 |
|        | and/ or light control center locations   |
|        | Note the type of street light and lamp on plan   |
|        | Provide dimensions between each street light   |
|        | Provide enough detail to locate the street light in the field  |
|        | Notes should be added to indicate if the contractor or Xcel will do the install                      |
|        | Verify whether project is within "Special Lighting District Boundaries" (TES)                        |
| 17. La | ndscaping Plans (required if project proposes street tree or streetscaping features                  |
|        | at must be maintained – may be combined with Lighting Plans in Item 16 above)                        |
|        | Show all existing and proposed trees, tree lawn, mulch areas, or supporting                          |
|        | irrigation systems.  |
|        | Detail unique or non-standard streetscaping elements (planters, walls, etc.)                         |
|        | Provide project specific notes indicating permanent maintenance responsibility                       |
|        | agreements for all installed vegetation or streetscaping features.                                   |
| 18. Cr | oss Sections (Required if constructing at least 500 continuous lineal feet of alley, curb,           |
|        | tter and/or sidewalk; OR if requested)   |
|        | Required every 50 feet. For new roadway, cross sections may only be required at                      |
|        | tie in areas (at the discretion of the PWPCO Transportation Reviewer)                                |
|        |  |
|        | Include sidewalk, curb and gutter, and roadway surfaces  |
|        | Cross slopes labeled   |
|        | Label elevations and offsets at the flowline, top of curb, crown, face of sidewalk,                  |
|        | back of sidewalk, ROW line, and grade breaks   |
|        | Vertical and horizontal plot scale of cross sections   |
| 19. Co | onstruction Phasing Plans (projects with required lane closures, detours, etc)                       |
|        | Schematic phasing plan with proposed construction cross sections for each phase.                     |
|        | Note proposed detours on plan (not required to depict- this is done on MHTs)                         |
|        | Note specific TES requirements for intersection work or other short term closures                    |
|        | Add work time and other access requirements on plan and/ or Project Specifications                   |
|        | Phasing plan matches concrete jointing detail (if applicable)  |
| 20 Da  | etail Sheets   |
| 20.00  | <u>Do not include CCD Standard Drawings/ Details in the plans.</u> Rather, reference                 |
| •      | same by the current <u>Public Works Transportation Standards and Details</u> or                      |
|        | Wastewater Management Division Standard Details drawing number(s) on the                             |
|        | appropriate plan sheet(s)  |
|        | Provide detail for any special, custom, or non-standard detail construction item                     |
| 21 D-  | idae Plane (projects with bridge elements to be maintained by City and County of                     |
|        | idge Plans (projects with bridge elements to be maintained by City and County of enver)              |
|        | Capital Projects inclusive of Bridge elements to be maintained by the City and                       |
|        | County of Denver shall provide necessary plan details per checklist supplied by CPM                  |
|        | Structural group, per following Shared network folder location:                                      |
|        | \\pwsfs00\agencies\PWPCO\Shared\PCO PROCEDURES\CPEP CHECKLIST\CPM                                    |
|        | BRIDGE DRAWING STANDARDS.pdf   |

**22**. **Engineering Geology Plans** (Applicable to projects requiring roadway replacement) (Not required if information is presented on Profile Sheets or other Plans, or on a separate Geotechnical and pavement design report) Show field investigation results (boring and test hole locations, depths, stratum soil type symbol with legend (or info in table form). Summary of soil classifications, strength or property tests usually in Geotech report □ Reference payement design and geotechnical reports ☐ In table form, identify soil types, any remedial soil treatments required, design traffic volumes, basis of and the design lane ESALs for each proposed pavement section/ thickness Foundation or retaining wall design, if applicable, or summarize criteria from Geotech report if Contractor is responsible for design 23. Project Technical Specifications (Standard Special Provisions, Project Special Provisions, CSI or AIA Division 1, Division 2, or other Project specific technical text) □ Provide separate Word or PDF document including Project Technical Specifications Provide link in Bid documents to standard technical specifications if available online 24. Responses to previous reviewer Comments Include a separate document in each plan Submittal package that identifies in writing how comments from the previous review cycle were addressed. Examples of response document/ matrices can be found in the following Shared network folder: \pwsfs00\agencies\PWPCO\Shared\PCO PROCEDURES\COMMENT RESPONSE **EXAMPLES** \*\* Additional supplemental studies may be required by the PWPCO as appropriate, including but not limited to separate traffic, pavement/geotechnical, drainage, or erosion control assessments. \*\* Required Design CPEPs should be designed per all current City and County of Denver PW Standards and Details, standard construction specifications, and ADA access requirements. In addition, the following Transportation design criteria will be required: a) Maximum longitudinal roadway grade = 7.0% (Steeper grades may be accepted at the discretion of PWPCO) b) Minimum longitudinal roadway grade = 0.7% (Flatter grades of no less than 0.5% may be accepted at the discretion of PWPCO) c) Maximum grade change without a vertical curve = Per AASHTO Chapter 3 d) Maximum flowline grade change without a vertical curve = 1.0% (up to 3.0% in extreme curb return circumstances). e) Length of vertical curve shall be designed to allow adequate sight distances (see AASHTO designation for stopping distance) and good delineation f) Streets shall intersect at a 90 degree angle and provide 50 feet of tangency (from ROW) q) Cul-de-sacs shall not exceed 400 feet in length and shall have a minimum ROW radius of 50 feet and a minimum flowline radius of 45 feet h) Maximum Desirable difference in elevation across street = 0.5' at flowline Minimum street cross slope: 1.50% • Maximum street cross slope: 4.00% i) Proposed sidewalk should have a 2% cross slope towards the street PCO may include project-specific design criteria not included above after initial review. Suggested Capital Project Plan Notes have been assembled for the convenience of Project Managers, available as "Suggested CPEP Plan Notes.doc" document in the following

## Suggested Plan Notes

Criteria

location: \pwsfs00\agencies\PWPCO\Shared\PCO PROCEDURES\CPEP CHECKLIST

It is not required to use this entire package of notes at this time, however, they may be used in entirety, and the PW Survey Department strongly recommends to apply the Survey notes portion of this document to each Project Plan Set, to ensure that PW Survey requirements are being addressed with each Capital Project. PW Survey may require to have these notes added as part of individual Project Design Review.

| Erosion Control<br>Permit Process                  | For each project, the PCO office will assist the PM in the first plan review cycle in determining whether an erosion Control Permit (CASDP) is required. Regardless of Permit requirements, technical specifications for Erosion Control have been prepared for use with all Capital Projects, located in the following location: |  |  |  |
|--|---|--|--|--|
|  | RESOURCES\SPECIFICATIONS\SECTION 208 - 070111.doc   |  |  |  |
| Required Final Documents to begin Construction Bid | all Capital Projects, located in the following location: \\pwsfs00\agencies\PWPCO\Shared\PROJECT DESIGN   |  |  |  |
| Checklist Location                                 |   |  |  |  |