PULP & PAPER INDUSTRY CAPABILITIES & EXPERIENCE

Engineering and Related Services

Norwest Engineering
Consulting Engineers

Portland, OR | Los Angeles, CA | Houston, TX | Denver, CO

Norwest Engineering, a national-level engineering firm, has been providing consulting engineering and related services to heavy industrial and governmental clients since 1975.

Norwest provides efficient and innovative solutions in delivering exceptional quality in both international and domestic pulp and paper markets. Our project experience includes working with several paper producers providing engineering, design and procurement.

EXPERIENCE

- Paper Machine Modifications & Relocations
- Structural Foundations for Various Machines
- Chip Loading Systems
- Effluent Treatment Systems
- Recovery Boiler Rebuilds
- Heat Exchanger Systems
- Extruder Projects
- Piping Relocations & Modifications
- Plumbing System & Pulp Handling Systems
- Distributive Control Systems
- Various Barge Dock Modifications
- Fuel Storage Systems
- Bale Feed Systems
- Electrical & Instrumentation Systems
- Extruder Knife Modifications
- Heat Recovery Systems
- Waxer Drives
- Various Mechanical Projects
- Stock Chest Projects
- On-Site Drafting & Engineering Assistance
- Solvent Piping Projects

SERVICES PROVIDED

- FEED Studies, Cost Estimating
- Inspections and Facility Evaluations
- Multi-disciplined Engineering Services
- Surveying and Mapping
- Geotechnical Investigations
- Procurement Services & Expediting
- Permitting Activities
- Construction Management Services
- 3D Laser Scanning and Modeling
- Design/Construct Responsibilities

It's Our People That Make Us The Best

NIPPON PAPER INUSTRIES USA (FORMERLY DAISHOWA-MARUBENI INTERNATIONAL)

PORT TOWNSEND PAPER

WEYERHAEUSER

BOISE INC. (FORMERLY BOISE PAPER)

WESTROCK (FORMERLY SIMPSON TACOMA KRAFT COMPANY)

GEORGIA-PACIFIC CORPORATION (FORMERLY JAMES RIVER CORPORATION)

WEYERHAEUSER- WEYCO

NORTH PACIFIC PAPER CORPORATION

R & W PAPER

KAPSTONE (FORMERLY LONGVIEW FIBER)

GEORGIA-PACIFIC CORPORATION

INLAND EMPIRE PAPER COMPANY

PULP & PAPER INDUSTRY
PROJECT LIST

Norwest Engineering
Consulting Engineers
Portland, OR I Los Angeles, CA I Houston, TX I Denver, CO

Weyerhaeuser Company, *Design Drafting*
Simpson Tacoma Kraft Company, *Inspection of Breasting Dolphins at Barge Unloading Facility*
Fort James Corp., *Structural Analysis of Recovery Furnace 10th Fl. Loading*
Fort James Corp., *Structural Analysis of Recovery Furnace Jib Crane Evaluation*
Fort James Corp., *Analyze 3 Jib Cranes & 3 Mezzanine Loadings*
Fort James Corp., *PM #3 Operating Floor Modifications*
Fort James Corp., *Fan House Roof (Crane Project)*
Fort James Corp., *Structural Analysis to modify truss at hogged fuel reclaim*
Fort James Corp., *Structural Analysis to replace wood glu-lan w/ steel beam*
Fort James Corp., *Structural Analysis to modify lift pad eye*
Simpson Tacoma Kraft Company, *Technical Assistance & Inspection for Unitizer*
Inland Empire Paper Company, *Manpower Assistance*
Boise Cascade Corp., *Parking Lot Drainage & Paving Design*
Boise Cascade Corp., *SPCC Plan/ Assistance*
Inland Empire Paper Company, *FKC Belt Press*
Smurfit Newsprint Corp., *Boiler Demolition & Relocation*
Smurfit Newsprint Corp., *Boiler, Capital Project*
Inland Empire Paper Company, *Chip Drainer for No. 3 Refiner Line*
Inland Empire Paper Company, *Drafting Assistance, Refiner Line Modifications*
Willamette Industries, Inc., *Design Drafting*
Willamette Industries, Inc., *Design / Drafting Assistance*
Inland Empire Paper Company, *Design / Drafting Assistance*
Inland Empire Paper Company, *AutoCAD Process Diagrams for New PM*
Smurfit Newsprint Corp., *PM #4 Vacuum Separator Replacement*
Evanite Fiber Corp., *Dust Collection & Stock Blending System*
Smurfit Newsprint Corp., *Effluent Loss Monitor Project, Capital Project*
Smurfit Newsprint Corp., *Effluent Loss Monitor Project, Demo / Relo Work*
Boise Cascade Corp., *#2 PM Second Press Felt Extension*
Boise Cascade Corp., *#2 PM Second Press Steam & Condensate System*
Boise Cascade Corp., *PCC Modifications*
Boise Cascade Corp., *300# Valve Inventory*
Smurfit Newsprint Corp., *#1 PM Roll Wrap*
Smurfit Newsprint Corp., *#4 PM Core Beveler Layout & Material Storage Room*
Boise Cascade Corp., *Starch Room Tank & Piping Relocation*
Inland Empire Paper Company, *Drafting Assistance, Reel (IEP #1274)*
Inland Empire Paper Company, *Drafting Assistance, Pulp Mill Screens (IEP #1275)*
Smurfit Newsprint Corp., *Design/Drafting Assistance #4 PM Hole Detector*
Smurfit Newsprint Corp., *Design/Drafting Assistance #4 PM Aqua-Trol Unit*
Smurfit Newsprint Corp., *Design/Drafting Assistance, Chip Blow Line Valve*
Smurfit Newsprint Corp., *Design/Drafting Assistance, Ink Jet Printer Installation*
Smurfit Newsprint Corp., *Design/Drafting Assistance, Sudor Press & Conveyors*
Inland Empire Paper Company, *Drafting Assistance, Soft Nip Calendar (IEP #1241)*
Inland Empire Paper Company, *Drafting Assistance, Press (IEP #1252)*
Inland Empire Paper Company, *Drafting Assistance, Dryers (IEP #1253)*
Boise Cascade Corp., *PCC Metering Pump Project*
Boise Cascade Corp., *Electrical Loop Diagrams*
Boise Cascade Corp., *Piping Design Services*
Smurfit Newsprint Corp., *Design / Drafting Assistance*
Smurfit Newsprint Corp., *Design / Drafting Assistance*
Smurfit Newsprint Corp., *Design / Drafting Assistance*
Smurfit Newsprint Corp., *Design / Drafting Assistance, Sudor Press & Conveyors*
Boise Cascade Corp., *Manpower Assistance, PCC Pipe Loop Revisions*
Boise Cascade Corp., *Manpower Assistance*
Inland Empire Paper Company, *Broke System*
Inland Empire Paper Company, *Fiber prep Scavenger Installation*
Boise Cascade Corp., *Drafting Services, Color Addition Project*
Boise Cascade Corp., *Up-date Mill P&ID's Diagrams*
Boise Cascade Corp., *Manpower Assistance, Pulp Barge Area*
Weyerhaeuser Company, *Huberfil Storage & Slurry System*
James River Corp. (CE), *Compressed Air Study in Converting Plant`*
James River Corp. (CE), *Engineering Study on No. 5 PM Air Compressor*
Weyerhaeuser Paper Company, *Neutralization Tank*
Inland Empire Paper Company, *Ash Handling Project*
Boise Cascade Corp., *Equipment & Piping Layout Assistance*
North Pacific Paper Corp., *Top Liner Screening Project*
Boise Cascade Corp., *Manpower Assistance, Outfall Station Project*
Boise Cascade Corp., *#1 Dump Tank HI-D Cleaner*
Boise Cascade Corp., *New Dock Construction Cost Study*
California Paperboard Corp., *Firewater Systems*
North Pacific Paper Corp., *Top Liner Screening Project*
Smurfit Newsprint Corp., *Clarifier Project*
Boise Cascade Corp., *Truck Dump Foundation & Footings*
Inland Empire Paper Company, *Design Maintenance Dept. Relocation Bldg.*
International Paper Company, *Oil Dock Engineering*
Willamette Industries, Inc., *Penntech Mill*
Daishowa America Co., Ltd., *Cost Estimate Preparation (Engr) for Afra-Autospec. Install*
Daishowa America Co., Ltd., *Detail Design of Bag House Doors*
North Pacific Paper Corp., *CAD Terminal*
Daishowa America Co., *Ltd. No. 3 PM Safety Item*
Port Townsend Paper Company, *Provide Designer for On-site work*
International Paper Company, *Screen Room*
Boise Cascade Corp., *Hazardous Piping Program*
Port Townsend Paper Company, *Hi-Density Stock Storage & Chip Thickness Screening*
Port Townsend Paper Company, *Design Stairway and Catwalk*
Simpson Tacoma Kraft Company, *Piping Design Assistance*
Inland Empire Paper Company, *Revisions to T.M.P. Building*
Pope & Talbot, Inc., *Furnish General Engineering Services*
Weyerhaeuser Company, *Supply CAD Equipment*
Pope & Talbot, Inc., *Engineering Services*

PULP & PAPER INDUSTRY
PROJECT LIST

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Portland, OR I Los Angeles, CA I Houston, TX I Denver, CO

Daishowa America Co., *Ltd. 1738-1512, Doctor 1st Dryer No. 3 PM*
Port Townsend Paper Company, *Steam Shower Installation, PM #1*
Boise Cascade Corp., *Rental of Drafting Equipment*
Boise Cascade Corp., *Rental of Drafting Equipment*
Daishowa America Co., Ltd. *Engineering Services*
Daishowa America Co., Ltd. *Provide Mechanical Designer at Job site*
Pope & Talbot, Inc., *Contract Engineering Services*
Weyerhaeuser Company, *AutoCAD Training / CAD Design Services*
Weyerhaeuser Company, *Supply CAD Equipment*
Daishowa America Co., Ltd., *1738-1499 #3 P.M. - Vacuum Transfer to Dryers*
James River Corp. (CE), *Contract Engineering Services for Pope & Talbot*
Port Townsend Paper Company, *Provide Structural Steel Designer for on-site work*
James River Corp. (CE), *Design Ovlid Platform & Chemical Tanks*
Inland Empire Paper Company, *Bel Baie Twin Wire Former Systems Drafting*
Inland Empire Paper Company, *Structural Engineering- Bel Baie Twin Wire Former, Etc.*
Daishowa America Co., Ltd., *AR1604 Winder Unwind Drive- No. 3 Paper Machine*
Daishowa America Co., Ltd., *1738-1475 Dryer Felt Cleaning No. 3 Paper Machine*
Willamette Industries, Inc., *Engineering Services*
Daishowa America Co., Ltd., *Engineering Services for Chip Loading Expansion & Remodel*
Boise Cascade Corp., *Install Additional Paving and Sewer*
Willamette Industries, Inc., *Engineering Services*
Boise Cascade Corp. Drafting, *& Design Services*
Inland Empire Paper Company, *Sludge Press Building- Analysis and Design*
Willamette Industries, Inc., *Provide Drafting (CAD) Assistance*
James River Corp. (CE), *Electrical Design Services*
Inland Empire Paper Company, *Wastewater Clarifier-Drafting of Pump Room & Walkway*
Daishowa America Co., Ltd., *1738-1477 Reel Spool Replace No. 3 Paper Machine*
Boise Cascade Corp., *Fabricate & Install tee Baffle Plate in Rejects Tank*
Boise Cascade Corp., *Repair No. 2 & 3 Deaerator*
Evanite Fiber Corp., *Prepare As-Built Drawings Sub-micro 5 Phase II Project*
Willamette Industries, Inc., *Engineering Services*
Willamette Industries, Inc., *Drafting Services*
Weyerhaeuser Company, *Furnish Designer for Various Tasks*
James River Corp. (CE), *Electrical Design Services*
Willamette Industries, Inc., *Engineering Services*
Boise Cascade Corp., Sodium Vapor Light Fixtures- Pulper Bldg. Roof
Daishowa America Co., Ltd. *AR1559 3rd Bottom Dryer Felt Knee Roll Install #3 P.M.*
Willamette Industries, Inc., *Design Services-Hi-Density Secondary Fiber*
Willamette Industries, Inc., *Design Services*
Smurfit Newsprint Corp., *Engineering Assistance*
Boise Cascade Corp., *Cap-off #5 Well Piping & Backfill*
Boise Cascade Corp., *Design / Construction - Lighting / Maintenance Shop*
Boise Cascade Corp., *Design / Construction Bleach Tower Piping*
Inland Empire Paper Company, *Structural Design of a Slinger Tower*
Boise Cascade Corp., *Architectural Review- Engineering Offices*
Daishowa America Co., Ltd., *Breaker Stack Vent*
Daishowa America Co., Ltd., *Calendar Stak Inlet Paper Roll*
Boise Cascade Corp., *Design / Construction Relocate Boral System*
Boise Cascade Corp., *Design / Construction Demolish*
Willamette Industries, Inc., *Engineering Services as Assigned*
Willamette Industries, Inc., *Engineering Services*
Willamette Industries, Inc., *Engineering Services*
Willamette Industries, Inc., *Drafting Services*
Boise Cascade Corp., *Raise 10" Broke Stock Line in Decker Area*
Boise Cascade Corp., *Remove Boiler Debris Pile outside Norwest Trailer*
Boise Cascade Corp., *Sample & Injection Point for Boiler Feed water Treatment System*
Boise Cascade Corp., *Demo out old Boiler Feed water Pump & Cap Two Pipes*
Daishowa America Co., Ltd., *Transfer Box- 3rd Press #3 Paper Machine*
Port Townsend Paper Company, *Design Services for 3 soot Blowers on Recovery*
Boise Cascade Corp., *Installation of Water Filter*
Willamette Industries, Inc., *Engineering and Supervision for General Maintenance Projects*
Boise Cascade Corp., *Demo of Screen and Decker Floors*
Willamette Industries, Inc., *No. 4 Recovery Invotrell Bypass Duct*
Willamette Industries, Inc., *Scope & Description - Waste Hi-Density Storage*
Boise Cascade Corp., *No. 3 P.M. Condensate Piping*
Boise Cascade Corp., *No. 2 P.M. "COMBI" Filters*
James River Corp., *Electrical Designer Services*
Willamette Industries, Inc., *Engineering Services*
Willamette Industries, Inc., *Waste Hi-Density Storage*
Daishowa America Co., Ltd., *Paper Machine 3rd Press Felt*
Daishowa America Co., Ltd., *Bottom Press Roll Doctor 2nd Press*
Daishowa America Co., Ltd., Relocate Wet Belt UHLE Box #2 Paper Machine
Daishowa America Co., Ltd., *Main Lab Ventilation Revision*
Daishowa America Co., Ltd., *Roll Wrap Upgrade*
Daishowa America Co., Ltd., *Suction Draw Roll #3 Paper Machine*
Boise Cascade Corp., *Pumping Station Temporary Screen*
Daishowa America Co., Ltd., *Doctor-Top Roll Breaker Stack #3 Paper Machine*
Daishowa America Co., Ltd., *Guards-Calendar Stack #3 Paper Machine*
Daishowa America Co., Ltd., *Balancer - Roll*
Boise Cascade Corp., No. 2 P.M. Dryer Doctors
Boise Cascade Corp., *Low Density by Pass / Recirculation Pump- Design & Const.*
James River Corporation, *New 1/2 Ton Jib Crane & Mezzanine Floor Framing*
Boise Cascade Corp., *Expose Existing 12" Pipe from No. 5 Well*
Smurfit Newsprint Corp., *Follow-up No. 1 P.M. DE aeration*
Boise Cascade Corp., *12" S.S. Stock Line Removal & Replacement- Design & Const.*
Daishowa America Co., Ltd., *Paper Machine-Venta NIP Conversion*
Smurfit Newsprint Corp., *Various Mill Projects*

PULP & PAPER INDUSTRY
PROJECT LIST

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Boise Cascade Corp., *AFE for sludge presses*
Boise Cascade Corp., AFE for #1 PM 4th section dryer
James River Corporation, *Column investigation*
Boise Cascade Corp. No., *2 save-all-Retention Aid Storage Tanks*
James River Corporation, *Checking of Existing Timber Columns*
Boise Cascade Corp., Prepare AFE for Ash Handling System
Smurfit Newsprint Corp., *#1 T.W.F (Capital)*
Smurfit Newsprint Corp., *#1 P.M. Save-all Relocation to #3 P.M.*
Smurfit Newsprint Corp., D.I. Improvements Phase II (DEMO)
Smurfit Newsprint Corp., *D.I. Improvements Phase I (CAPITAL)*
Boise Cascade Corp., *Elevator Replacement*
Boise Cascade Corp., *No. 1 P.M. Steam Setting*
Boise Cascade Corp., *OMC Sec. Dryer Section Gearbox*
Evanite Fiber Corp., *Sub Micro Phase II Project -Design & Construction*
Boise Cascade Corp., *CAD Training*
James River Corporation (CE), *Engineering Assistance*
Smurfit Newsprint Corp., *#4 P.M. Disk Filter Relocation*
Boise Cascade Corp., No. *3 P.M. Steam System*
Boise Cascade Corp., *Steam Turbine Replacement*
Boise Cascade Corp., *Re-pulper Facility - Design & Construction*
Boise Cascade Corp., *Hazardous Piping Project on AutoCAD*
Willamette Industries, Inc., *Design Drafting*
Boise Cascade Corp., *Modification to No. 2 P.M. Dryer Drainage*
Boise Cascade Corp., *River Fire Pump Repining*
Boise Cascade Corp., *OMC Steam PRV*
Boise Cascade Corp., *Replacement of Dissolving Tank Recovery Boiler*
Boise Cascade Corp., *OMC No. 9 & 10 Dryers*
Boise Cascade Corp., *Mill Water Well Pumps*
Smurfit Newsprint Corp., No. 1 Savall
Boise Cascade Corp., *Preparation of Various AFE's*
Smurfit Newsprint Corp., *#1 P.M. Demo- Mechanical*
Smurfit Newsprint Corp., *Fan Drains*
Smurfit Newsprint Corp., *TMP Heat Recovery*
Simpson Paper Company, *Upgrade CAD System*
Boise Cascade Corp., Tile Tank
Smurfit Newsprint Corp., *No. 5 Paper Machine 3rd Installation*
Smurfit Newsprint Corp., *No. 5 Paper Machine 3rd Press Installation*
Smurfit Newsprint Corp., *PCB Transformer Replacement Installation*
Smurfit Newsprint Corp., *PCB Transformer Replacement Demo*
Smurfit Newsprint Corp., *TMP Heat Recovery*
Boise Cascade Corp., *Infrared Dryer*
Boise Cascade Corp., *Engineering Re-support of Roof & Pulen in Lower Finishing Room*
Weyerhaeuser Company, *Redesign of Broke Conveyor*
Smurfit Newsprint Corp., *Fan Drain Collection for #6 P.M. Wet-End Ventilation*
Smurfit Newsprint Corp., *Top Wire Former #1 P.M. Rev-1*
Boise Cascade Corp. *Maintenance -Engineering Assistance*
Crown Zellerbach Corporation, *Revised Underground Eff. Drawings*
Smurfit Newsprint Corp., *No. 4 P.M. Speed-Up (Electrical)*
Smurfit Newsprint Corp., *De-ink Modification (Electrical)*
Weyerhaeuser Company, *Steel Detailing - 3rd Stage Washing*
Weyerhaeuser Company, *Steel Detailing - Sec Fiber Thickener*
Boise Cascade Corp., *#1 P.M. Water Recovery*
Smurfit Newsprint Corp., *#4 P.M. Demo (Electrical)*
Crown Zellerbach Corporation, *#1 Waxer Rewind Mandril Design*
Crown Zellerbach Corporation, *#7 Slitter Case Packer*
Simpson Tacoma Kraft Company, *Engineering & Design of 2 Pressure Screens*
Crown Zellerbach Corporation, *Interior Solvent Piping*
Boise Cascade Corp., *Delivery of Computer Equipment*
Smurfit Newsprint Corp., Miscellaneous Mill Projects
Boise Cascade Corp., Installation *of #3 Hood Door Air piping*
Boise Cascade Corp., *Installation of Aquatrol Shower Unit / System*
Boise Cascade Corp., *#2 P.M. Steam & Condensate System Estimate*
Weyerhaeuser Company, *Eng. Services - Relocate No. 2 Ble Feed Systems*
North Pacific Paper Corp., *Provide Computer Hardware & Software Requested*
Smurfit Newsprint Corp., *High Pressure Shower System #6 P.M.*
Smurfit Newsprint Corp., Coaxial Feeder Installation
Smurfit Newsprint Corp., *#4 P.M. Speed-up*
North Pacific Paper Corp., *Assist in setting up new Monitor & Software*
Crown Zellerbach Corporation, *Interior Solvent Piping*
North Pacific Paper Corp., *CAD System, Training & Menu Programming*
Crown Zellerbach Corporation, *Master Equipment List*
Crown Zellerbach Corporation, *Refrigeration System Isometrics*
Crown Zellerbach Corporation, *N. Marine Drive Project*
Crown Zellerbach Corporation, *Update Plant Drawing Log*
Smurfit Newsprint Corp., *Assist Mill Engineer as directed*
Smurfit Newsprint Corp., *Top Wire Former #1 P.M.*
Smurfit Newsprint Corp., *#4 P.M. Speed Up R-W Papers Project Design*
Smurfit Newsprint Corp. *Demo Relocate related to top wire former #1 P.M. Project*
Smurfit Newsprint Corp. *Demo Relocate related to #4 P.M. Project*
Crown Zellerbach Corporation, *Engineering Drawings Storage*
Boise Cascade Corp. *Develop Independent Pipe Support System*
Boise Cascade Corp. *Modify the Mill Fire Map*
Smurfit Newsprint Corp. *De-ink Quality Improvements*
Crown Zellerbach Corporation, *KAMPF Slitter Foundation*
Crown Zellerbach Corporation, *Hamblet Back Stand Engineering*
Crown Zellerbach Corporation, *Hamblet Back Stand Pre-Engineering*
Crown Zellerbach Corporation, *Structural Review of Crane*
Boise Cascade Corp., *Kidder Roll Service*
Boise Cascade Corp., *Furniture Rental*
Boise Cascade Corp., *Fire Line Location Drawing*
Boise Cascade Corp., Maintenance Engineering
Crown Zellerbach Corporation, *Sketches for Easy Mover*
Crown Zellerbach Corporation, *Plant Plot Photo*
Crown Zellerbach Corporation, *No. 2 Ext. Perf Knife Modification*
Boise Cascade Corp., *P.M. 1 & 3 Retention Aid*
Crown Zellerbach Corporation, *No. 1 Ext. Easy Mover Final Engineering*
Boise Cascade Corp., *Evaluate Hoist & Bridge System No. 2 P.M.*
Willamette Industries, Inc., *Misc. Mill Projects for May / June Shutdown*
Crown Zellerbach Corporation, *CAD Operator - Loop Sheets*
Weyerhaeuser Company, *Structural Engineering*
Crown Zellerbach Corporation, *No. 16 KMPF Electrical Drawings*
Boise Cascade Corp. No., *1 P.M. Second Press Top Role Dr.*
Crown Zellerbach Corporation, *#1 Ext. Dahlgren Plim. Layout*

PULP & PAPER INDUSTRY
PROJECT LIST

Norwest Engineering
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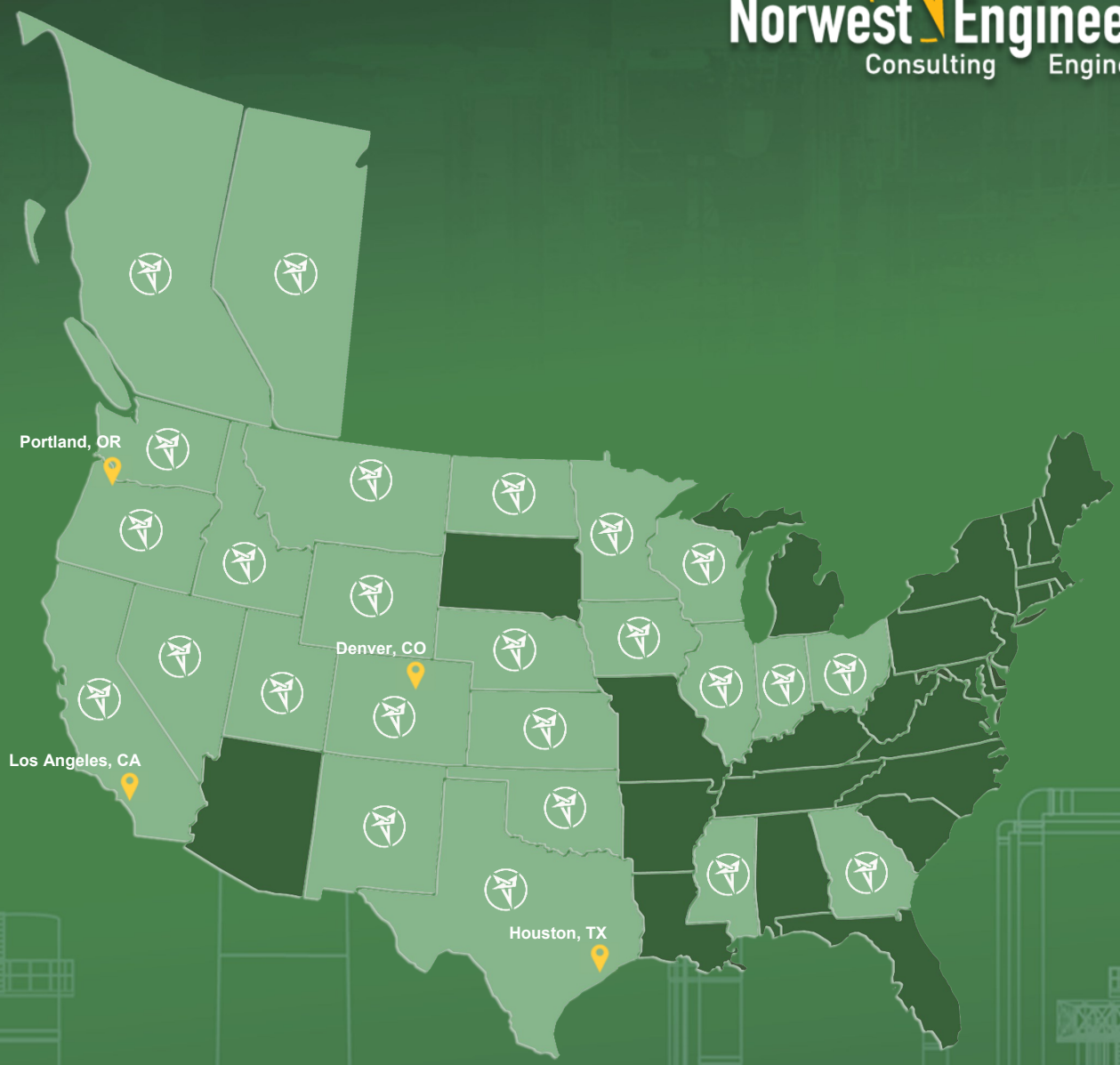
Crown Zellerbach Corporation, *Plant Stm. & Cond. Piping Drawings*
Boise Cascade Corp., *CAD System & Installation*
Weyerhaeuser Company, Re-Draw W. Revision Loop Sheets
Weyerhaeuser Company, *Structural Estimating for Variable Projects*
Boise Cascade Corp., *Roll Storage Crane Survey*
Boise Cascade Corp., *Arrow Wider Modification*
Boise Cascade Corp., *Dahlgren Coater Pan*
Boise Cascade Corp., Design OMC Coater Pan
Boise Cascade Corp., *Steam Plant P&I (CAD)*
Willamette Industries, Inc. *Field Drafting*
Crown Zellerbach Corporation, *Instrumentation Design*
Boise Cascade Corp., C.F. Hazardous Piping
Boise Cascade Corp., *CAD Training*
Crown Zellerbach Corporation, *Pipe Labeling*
Boise Cascade Corp., *Hazardous Piping Project on AutoCAD*
Boise Cascade Corp., *Clarifier Shut Down*
Boise Cascade Corp., *No. 2 P.M Condensate System*
Crown Zellerbach Corporation, *Organize Vendor Files*
Crown Zellerbach Corporation, *Plant Layout Update*
Boise Cascade Corp., *6 Copies of Paper Machine Drawings from CAD*
Boise Cascade Corp., *CAD Training Program*
Boise Cascade Corp., *#1 P.M. Second Press Doctor AFE*
Boise Cascade Corp., *Bailey System Drawing update*
Weyerhaeuser Company, *Effluent Modifications*
Crown Zellerbach Corporation, *Ten Position Back stand*
Crown Zellerbach Corporation, Press Cylinder Air Load
Crown Zellerbach Corporation, *Machine Layout Kampf Slitter*
Crown Zellerbach Corporation, *Resin Tank #3 Installation*
Crown Zellerbach Corporation, *Stretch-Wrapper Installation in Warehouse*
Simpson Paper Company, *Upgrading Current CAD System*
Crown Zellerbach Corporation, Proposed Main East Entrance
Crown Zellerbach Corporation, Critical Equipment Inventory
Crown Zellerbach Corporation, #7 Slitter Tail Tie Modifications
Crown Zellerbach Corporation, *Inspect Steel on Crane Rail*
Boise Cascade Corp., *Auto CCAD Evaluation*
Boise Cascade Corp., *Coater Vent. AFE*
Boise Cascade Corp., *Bailer Wire Inserter Service*
Boise Cascade Corp., *AFE Air Compressor*
Boise Cascade Corp., *Winder Platform*
Boise Cascade Corp., *Clarify Flow Management*
Boise Cascade Corp., *#2 p.m. Couch Pit Pump*
Boise Cascade Corp., *Converter Winder Spec.*
Crown Zellerbach Corporation, *Instrumentation Design*
Boise Cascade Corp., *Coater Ventilation Fan*
Boise Cascade Corp., *Dahlgren Coater AFE*
Boise Cascade Corp., *Boiler Tap*
Willamette Industries, Inc., *Machine Layout*
Boise Cascade Corp., *Kamyr Disaster Drawings*
Crown Zellerbach Corporation, Air Piping and Equipment Drafting
Crown Zellerbach Corporation, *Unwind Stand Revision*
Crown Zellerbach Corporation, *Proposed Nurses Station*
Crown Zellerbach Corporation, *Update Utility Drawings*
Boise Cascade Corp., *Fire Line Contractor Supervision*
Boise Cascade Corp., *#3 PM Deckle Shower*
Crown Zellerbach Corporation, *Plant Drawing Organization*
Boise Cascade Corp., *Bayer Sump Revision*
Crown Zellerbach Corporation, *Asbestos Documentation*
Simpson Paper Company, *Auto CAD System*
Boise Cascade Corp., *Revise Clear well*
Boise Cascade Corp., *Hazardous Piping Program*
Boise Cascade Corp., *#2 PM Four drainer*
Crown Zellerbach Corporation, #7 Slitter Vendor Drawing List
Boise Cascade Corp., *#5 Bleach Chest Agitator*
Boise Cascade Corp., *Carbonless Winder Expansion Foundations*
Crown Zellerbach Corporation, *#7 Waxer Paddle Guard*
Crown Zellerbach Corporation, *#6 Slitter Paddle Guard*
Boise Cascade Corp., *AFE Prp. Water Softener System*
Crown Zellerbach Corporation, *Proofing Machine Modification*
Crown Zellerbach Corporation, *Bldg. Drawing Update*
Crown Zellerbach Corporation, *CEO Tracing Retile*
Crown Zellerbach Corporation, *Drainage Trench*
Weyerhaeuser Company, *Revise Existing Cross Bracing Col's*
Boise Cascade Corp., *Drying Doctor Blades*
Boise Cascade Corp., Off Machine Coater Break Knife
Boise Cascade Corp., *Compressed Air Dryer*
Boise Cascade Corp., *Concrete Panel Detailing*
Boise Cascade Corp., *Carbonless Capsule Study*
Crown Zellerbach Corporation, *Closed Ink System*
Crown Zellerbach Corporation, *Laminator Lowering Table*
Boise Cascade Corp., *Prepare Drawing For Four drainer*
Boise Cascade Corp., *Mill Air Header ISO*
Boise Cascade Corp., C.F. Winder Trim System
Boise Cascade Corp., *#2 PM Dandy Roll*
Boise Cascade Corp., *Coaster Condensate*
Crown Zellerbach Corporation, *#2 Waxer Modification Drive Engineering*
Boise Cascade Corp., *Converting Winder Foundation*
Boise Cascade Corp., *Kidder Press Smoothing Roll*
Boise Cascade Corp., *Seal Pit Pump*
Crown Zellerbach Corporation, *#6 Waxer Installation Modification*
Boise Cascade Corp., *Piping Modification Evaporator Set*
Boise Cascade Corp., *Maint. C.A.D. System Set-up & Implementation*
Weyerhaeuser Company, *Review Earthquake Bracing for Foot*
Boise Cascade Corp., *Rec. Boiler Area Misc. Jobs*
Crown Zellerbach Corporation, *#7 Slitter Water Cooled Brake*
Boise Cascade Corp., *AFE #2 P.M. 3rd Section Felt Cleaner*
Crown Zellerbach Corporation, *#2 Extruder Knife Pre-Engineering*
Crown Zellerbach Corporation, *#2 Extruder Knife Modification*
Boise Cascade Corp., *#1 P.M. Air Loaded Press Doctor System*
Willamette Industries, Inc., *Design Drafting*
Crown Zellerbach Corporation, *#7 Waxer Unwind Spindle Drive*
Crown Zellerbach Corporation, *#6 Slitter Unwind Spindle Drive and B*
Crown Zellerbach Corporation, *72" Wide Waxer*
Crown Zellerbach Corporation, *#2 Waxer Mod Prelim Engineering*
Crown Zellerbach Corporation, *Shop / Storeroom Electrical Layout*
Boise Cascade Corp., *Supervise / Coordinate*
Boise Cascade Corp., *MOST Project*
Boise Cascade Corp., *Electrical / Instrumental Design Field Routine*
Boise Cascade Corp., *Sheet Coater #2 P.M.*
Boise Cascade Corp., *Felt Roll Bearing Housing*
Boise Cascade Corp., *Filing for #2 & ## Rec. Fuel Cut-off*
Boise Cascade Corp., *AFE Coater Office*
Boise Cascade Corp., *Mill Water Sand Separation*

RECENT PROJECT LOCATIONS

Norwest Engineering
Consulting Engineers



Norwest Engineering's experience translates to a specific advantage for our clients. We have the knowledge and expertise within a wide range of engineering disciplines providing comprehensive services for major heavy industrial, petroleum, chemical, power generation, pulp & paper, metal manufacturing facilities and federal state and city agencies throughout the United States and Canada.

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