

DIVISION 1 - GENERAL REQUIREMENTS

SUMMARY OF THE WORK

01010

Work covered by the Contract includes demolition of existing partitions, carpeting, and lighting systems; installation of new carpeting, partitions, wallboard, doors and millwork, finishes, plumbing fixtures, lighting fixtures and controls and wiring for the U.S. Environmental Protection Agency (Tenant) Park Place Building, 1200 Sixth Ave., Seattle

Moveable wall systems will be installed by others after completion of this contract work.

Special conditions arise from the environmental focus of the project. For the purposes of this project, "environmentally sustainable" means reducing, reusing and recycling construction, demolition and worker waste, and the selection and installation of environmentally preferable building products and materials.

Environmentally preferable products and materials are those which minimize the content of toxic or harmful substances; release minimal amounts of volatile organic compounds (VOCS) or CFCs into the environment; contain significant amounts of post-consumer recycled materials; are recyclable; are produced transported and installed in an energy efficient manner; and do not impact rare or endangered natural resources.

Owner furnished products

Track lighting and fixtures.

Security devices

Acoustic ceiling tiles

Plumbing fixtures per plan detail

Modular carpet tiles

Architectural Glass

SPECIAL PROJECT PROCEDURES

01100

Product Curing

All dry furnishings and materials (such as carpet, floor tile, acoustical tile, textiles, wood shelving, and furnishings, etc.) shall be allowed to vent or cure for 48 hours prior to being brought on site.

Venting shall be conducted by removing all packaging materials, allowing fumes and odors to vent to the atmosphere for 48 hours, while protecting the materials from damage or degradation prior to installation.

Work Sequencing

The work shall be arranged to avoid contamination of building materials and systems by construction debris and dust. "Dry" furnishings and materials shall not be installed until "wet" materials have been applied and allowed to dry to the extent feasible and in accordance with other good building practices. The Contractor is to comply with any recommended measures in the MSDS to protect the health and safety of personnel.

Space Flush-out

A flush out period of 7 days at ambient temperatures with 100% outside air ventilation prior to occupancy, as approved by the Tenant. All toxin emitting materials, except furnishings, shall be in place, unpacked, prior to commencement of the flush-out period.

PROJECT MEETINGS

1200

The Contractor shall conduct the following meetings. Meeting agendas should include discussion of progress, status and problems associated with the environmental goals and requirements established for the project.

———Pre-construction meeting. Prior to commencement of the Work, the Contractor shall coordinate a preconstruction conference. The preconstruction conference shall address all project specific requirements enumerated in Division 1 of the Specifications, building rules and regulations and other issues deemed appropriate by the Contractor, Owner, Architect or Tenant. Parties required to attend the preconstruction conference include the Contractor, Subcontractors, Owner, Architect and Tenant

Progress Meetings The Contractor shall conduct weekly meetings to discuss the schedule and construction administration issues.

Daily Coordination Meetings. The Contractor will attend a daily coordination meeting to briefly discuss the activities scheduled for the following day.

SUBMITTALS

01300

The environmental focus of the project requires product submittals that assure the desired performance. Specific performance criteria are detailed in individual specification sections as required. Documentation described in specification sections shall be submitted to the designer for approval prior to fabrication or installation. General requirements are as follows:

Construction Schedule

Within 7 days following the Notice to Proceed the Contractor will submit a construction schedule delineating work sequences and indicating milestone submittal dates.

Compliance Assurances

Prior to commencement of the work, the Contractor is to submit in writing specific steps that the Contractor will take to ensure that all subcontractors comply with the "Green" product and practice

requirements and specifications.

Waste Management/Pollution Prevention Plan

See Exhibit D, Waste Management Requirements. The Waste Management/Pollution Prevention Plan must be presented to the Tenant for approval after award of contract and before start of work.

Materials Safety Data Sheets

The contractor is to provide the Tenant a Material Safety Data Sheet (MSDS) on selected products, in order to preserve the strict source control that has been achieved through material specification.

Product Affidavit Forms

Use the Product Affidavit Form (Exhibit E) to propose a substitution and to describe the environmental performance of the proposed product or practice.

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

01500

HVAC

The return side of the VAV system shall be turned off during the construction period, and temporary fan powered exhaust shall be provided. Outside air settings for the air handler shall be 100% outside air.

Exhaust air shall be extracted from the space by removing 2 spandrel panels at each corner of the construction area, and construction of an air plenum that vents to the outside. Contamination of other spaces on the floor shall be prevented with a plastic membrane, sealing doors and other openings with duct tape at head, jamb, and sill.

Contractor to install temporary construction filters in air handler during the construction period. Filters are to be replaced after completion of the flush out period.

Use window exhaust systems to establish negative pressure in contaminant-producing work area, ensuring continuous flow of air into work area. Seal exhaust system ductwork that might leak into building or mechanical systems.

Performance Criteria

Provide temporary construction filters

Exhaust air to be extracted at a rate sufficient to produce continuous negative pressure in the work area.

WASTE MANAGEMENT

01505

General

The tenant has established that this project shall generate the least amount of waste possible and that processes shall be employed that ensure the generation of as little waste as possible due to error, poor

planning, breakage, mishandling, contamination or other factors.

Waste disposal in landfills shall be minimized, and as many of the waste materials as economically feasible shall be reused, salvaged or recycled.

Submittal - Waste Management/Pollution Prevention Plan

The Contractor shall develop and submit a Waste Management Plan for review and approval by the Owner and Tenant after award of contract and before beginning any work. See Exhibit D for requirements and contents of Waste Management Plan.

SUBSTITUTIONS**01630****General**

All materials must be furnished and installed exactly as specified in the contract documents. Where substitutions are offered, the Contractor or Sub-Contractor must provide Owner and Tenant with a 3 part submittal prior to installation and use for review and approval by EPA's Health and Safety Officer. (See also Section 01300.) The three parts are:

1. Product Affidavit Form
2. MSDS (Materials Safety Data Sheet)
3. Product catalog cut

DIVISION 2 - DEMOLITION**General**

Waste Management Plan must be approved prior to beginning demolition.

Execution

1. Separate carpet, wood waste, drywall, excess metals and other materials as appropriate for recycling in accordance with the Waste Management Plan and place in designated areas and/or containers for recycling.
2. Carefully remove and salvage or store and reuse plumbing, mechanical and electrical fixtures and all doors and relites per the contract drawings and specifications.

DIVISION 6 - WOOD AND PLASTICS**CASEWORK****06400****General**

Any casework installed on the site must be constructed from non-toxic, formaldehyde-

free, low VOC materials. Where economically feasible, previously used materials in good and usable condition should be used first, followed by products with a high percentage of recycled content.

Acceptable materials

All substrate materials to be manufactured without the use of urea formaldehyde additives or permanently sealed to prevent out-gassing. Additionally, non-toxic glues and low VOC products should be used in the fabrication of any work.

1. Medex/Medite, or equivalent product.
2. Comply sheathing with 100% wood fiber product

Veneer should be from red oak species harvested and procured in the United States or Canada from certified lumber providers, certified as practicing sustainable forest management as recognized by independent forest management certification agency. Contact Jeff Wartelle, Certified Forest Products Council for sources and technical assistance.

Performance criteria

3. Acceptable certifiers shall be the Smart Wood Program (212-677-1900) or the Forest Conservation Program (510-832-1415) or Forest Stewardship Council accredited equivalent.
4. The contractor must submit to the Tenant chain of custody documentation (i.e. invoices and certificates) for lumber purchased for this project, proving that each source of lumber is certified. Such documentation shall be submitted to the designer for approval prior to fabrication.

Performance criteria

5. Particle board and plywood materials are to be manufactured with no formaldehyde-based glues or resins.
2. Veneer to be supplied from certified lumber providers.

Substitutions

The products listed above are acceptable to the Tenant. Any other products must receive approval by the Tenant's representative prior to furnishing and installation. Substitutions requests shall be made according to Section 01630.

FASTENERS AND ADHESIVES

06050

General

All adhesives employed on the project including, but not limited to, adhesives for carpet, carpet tile, plastic laminate, wood adhesive, or sealants are to be those with the

lowest possible Volatile Organic Compound "VOC" content and which meet requirements of the manufacturer of the products involved or adhered.

Ceramic tile shall be set with thin-set method.

Acceptable Products

1. Milliken Pressure Sensitive Adhesive for modular carpet tiles.
2. Safecoat 3 in 1 Adhesive, a low-odor, non-toxic, water-based adhesive designed for hard composition wall and floor tiles. Recommended for adhering hard composition floor and wall tiles and carpet.
3. Envirotech Adhesive #2045, an acrylic clear-set, pressure-sensitive adhesive used to adhere padding to substrate.
4. Envirotech Adhesive #2055, used to adhere carpet to padding. It is a high-solids, high tack, fast drying adhesive formulated for Bond 'N Peel installation of a wide variety of carpets.
5. Envirotech Adhesive #2058 is a latex-based economy grade floor covering adhesive developed for the installation of many types of carpets and sheet goods destined for direct glue down, excluding those with vinyl backings. Envirotech is a low VOC adhesive.

Performance criteria

1. Total VOC below 50g/L.
2. Contains no formaldehyde.

Substitutions

The products listed above are acceptable to the Tenant. Any other products must receive prior approval by the Tenant's representative. Substitutions requests shall be made according to Section 01630.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

INSULATION

07200

Contractor is to seal off perimeter units after venting occurs using EPA approved insulating materials.

Acceptable products

1. Thermafiber LLC, Tacoma, WA 702/868-7711;
2. OCHT, Toledo, OH, subsidiary of Owings Corning, 419/248-6097;
3. Fibrex, Include, Westmont, IL; 630/887.1200;

4. Roxul, Inc., Milton. Ontario 905/878-8474, or approved equal.

Performance criteria

3. Recycled post-industrial content of product shall be 75% post consumer material.

DIVISION 8 - DOORS AND WINDOWS

WOOD AND PLASTIC DOORS

08200

Building Standard Door Frame Specifications

Plain sliced solid premium grade red oak, ready for finish.

Nominal frame dimensions 1-1/2" x 4-3/4".

Frame and door finishes to match.

Frame size shall receive 1-3/4" thickness, height and width per schedule, solid core, or relite glazing as required.

Door Specifications

See Sheet A2 for door schedule.

Door Group A:

Reuse Existing Building Standard. Touch up as required. Request list of acceptable cleaning products from tenant.

Door Group B:

New Full Height Door with Architectural Glass. Plain sliced premium grade red oak veneer ready for finish. Premachined for cylindrical bore. Match existing door stain color.

Door Group C:

New Sliding door provided by SMED Manufacturing and installed by Contractor.

Door Group D:

New Building Standard Bi-Fold Closet Door, 30" wide. Plain sliced premium grade red oak veneer ready for finish. Match existing door stain color.

Door Group E:

Reuse existing standard bi-fold closet door, 72" wide. Touch up as required. Request list of acceptable cleaning products from tenant.

Execution

Reuse any doors or relites which fit the overall project design. Any doors or relites not used are to be stored at a location designated by the tenant.

Door and Frame Finishes

Acceptable Products

A. Semi-transparent finishes

1. Ostermann & Scheiwe (OS) Color Wood Wax Finish, US supplier: Environmental Home Center, 1724 Fourth Avenue South, Seattle WA, 206/682-7332.
2. Livos Kaldet Oil and Resin Finish

Performance Criteria

1. Contains plant-sourced oils and solids utilizing only natural and/or aliphatic solvents.

B. Transparent finishes

1. Safecoat Polyureseal BP by American Formulating and Manufacturing, 350 West Ash Street, Suite 700, San Diego, CA 92101, (619)239-0321.

Performance Criteria

1. Satin water-borne polyurethane containing no formaldehyde.
2. Total VOC below 200g/L.

08700

HARDWARE

Specifications

Refer to Sheet A2 for Hardware Schedule.

Hardware Group a - Tenant Corridor Doors

- 1 Lockset Schlage D80pd, Rhodes 3 3/4, 626 Finish
- 1 Stop As appropriate for door function and location.
- 1 Closer Rushwin or Corbin

Wired for tenant supplied electronic card access.

Hardware Group b - Building Standard Passage

Not used.

Hardware Group c - Building Standard Passage Set w/ Closer

1 Latchset	Schalge D10s, Rhodes 3 3/4, 626 Finish (Level handle)
1 Stop	US 26 D3" Round
1 Closer	Rushwin or Corbin

Hardware Group d - Building Standard Bi-fold door hardware

1 pair Wire Pulls

Magnetic Catch

Hardware Group e - Building Standard Privacy Lockset

Re-use one from demolished accessible restroom.

GLASS AND GLAZING

08800

General

All interior doors and relites requiring vision panels and sidelights are to be glazed with 1/4" tempered safety glass. This does not apply to doors requiring a fire rating. Additionally, architectural glass will be ordered by the tenant for Room 1411 (Service Center) and all doors and relites in the Suite 1400 (Regional Administrator's Suite). Installation provided by contractor.

DIVISION 9 - FINISHES

ACOUSTIC CEILING

09510

Execution

1. Reuse existing tiles and grid as appropriate.
2. Provide cutouts and other special provisions in acoustical work as required for lighting fixtures, registers, diffusers, and other inserted items.
3. All materials shall have Class 1 Flame Spread rating and be installed in accordance with manufacturers' specifications and codes.
4. All joints in the tile shall be square, level and perfectly aligned with each other.
5. Coordinate work with other trades having work in the ceiling and with telephone and computer cabling installation.
6. Do not use spray paint for touch up of acoustic ceiling tile or grid. Apply low or no VOC paint with a brush. Paint does not need to be metal paint for touch ups.

Acceptable Products

Ceiling tiles are furnished by the Owner.

GYPSUM BOARD SYSTEMS

09250

Performance Criteria

6. Any gypsum wallboard or sheet rock must utilize 100% recycled paper and be composed of a minimum 33% recycled gypsum content.
7. All metal studs have some recycled content, but one domestic producer, Nucor Steel, consistently has the highest recycled content of any steel and should be supported, if possible. The work of this section shall be manufactured or fabricated from metals with a minimum of 30% recycled content.
8. Batt Insulation - Reference 07200.

Execution

Do not use spray paint for touch up of reveal at top track. Apply low or no VOC paint with a brush. Paint does not need to be metal paint for touch ups.

CARPET

09680

Acceptable Products

Refer to design drawings for materials and installation details.

Carpet "A" to be provided by tenant and installed by Contractor.

Carpet "B" to be provided and installed by Contractor.

Adhesives Reference Division 6.

PAINTING AND STAINING

09900

Installation

9. Prime all wall surfaces and, unless otherwise noted, paint with a minimum of two finish coats, color to be selected by tenant.
10. Prime all painted wood surfaces and, unless otherwise noted, paint with a minimum of two finish coats, color to be selected by tenant.
11. Finish for existing pre-finished doors shall be determined by conducting a test patch area on a door to be discarded. Low toxic finish which is compatible shall be determined.
12. Upon completion of work, remove excess paint, stain, varnish, adhesive, caulk, etc. from all other surfaces that were not specified to receive same.
13. Touch up and patch surfaces as required after the completion of work by other trades.

Acceptable Primer Products

1. Safecoat New Wallboard Primecoat HPV by American Formulating and Manufacturing, 350 West Ash Street, Suite 700, San Diego, CA 92101, (619)239-0321.

Performance Requirements

1. Product must not contain formaldehyde, aqueous ammonia, crystalline silica, or ethylene glycol.
2. Total VOC below 50 g/L or less.

Acceptable Paint Products

1. Safecoat Flat Zero VOC by American Formulating and Manufacturing, 350 West Ash Street, Suite 700, San Diego, CA 92101, (619)239-0321.
2. ICI Lifemaster 2000, Cleveland Ohio 44115, 800/984-5444

Performance Requirements

1. Product must not contain formaldehyde, aqueous ammonia, crystalline silica, or ethylene glycol.
2. Total VOC below 1 g/L.

SECURITY EQUIPMENT

11020

General

Contractor is to provide wire for tenant supplied access card readers and electronic locks. Refer to contract drawings for locations.

Removal and Installation

The tenant has arranged with Pinkerton Security to remove, store and re-install existing card access devices.

Controls

Provide wiring for two "panic buttons" (one in the Room 1411 and one in the secretarial station in Room 1400.). They should be wired directly to 911. See contract drawings for locations.

DIVISION 12 - FURNISHINGS

Systems furniture not in contract. Systems furniture to be furnished by the tenant.

DIVISION 15 - MECHANICAL

HEATING, VENTILATING, AND AIR CONDITIONING

15500

General

All mechanical work to be performed as design/bid/build by McDonald Miller.

Installation

During construction the air handler systems and terminal devices serving the tenant shall be turned off. Remove two spandrel panels per phase area during construction, and provide temporary exhaust fans that will maintain negative pressure in the construction zone. Seal air paths to adjacent non-construction zones.

Balancing and Testing

Set balancing and testing standards subsequent to equipment selection and placement. Provide for equal distribution of supply air to offices, maintaining positive pressure at all times.

HVAC Sealant

Any HVAC Sealant must be low-odor, all weather, waterproof, vapor proof coating. Additionally, it must be non-toxic and non-carcinogenic. All sealants employed on the project are to be those with the lowest possible Volatile Organic Compound "VOC" content (below 20g/L), and which meet requirements of the manufacturer of the products involved or adhered.

Acceptable products

1. Safecoat DynoSeal by American Formulating and Manufacturing, 350 West Ash Street, Suite 700, San Diego, CA 92101, (619)239-0321.

Performance Requirements

1. Product must not contain formaldehyde, aqueous ammonia, crystalline silica, or ethylene glycol.
2. Total VOC below 20 g/L or less.

CONTROLS

15950

General

Thermostats required at moveable walls to be located and provided by contractor and to be installed by others.

Prior to installation Contractor to submit a plan for thermostat placement to EPA and building management's for review and approval.

DIVISION 16 - ELECTRICAL**LIGHTING**

16500

General

Contractor to submit design built plan to achieve the desired lighting concept. Remove, stockpile and reinstall existing lighting fixtures.

Ballasts

Supply and install dimming ballasts in Room 1404 as specified in contract drawings. Dimming ballasts shall be advanced Mark VII or equal as specified on the Lighting Design Lab ballast list.

Provide as Alternate

Dimming ballasts in areas specified in contract drawings.

CONTROLS

16900

In offices and conference rooms, manual override switches with dimming control should be installed to allow for individual control over lighting levels.

Occupancy Sensor

Provide and install ultrasonic and passive infrared ceiling mounted occupancy sensors as designated by the contract drawings..

Products

1. Unenco Ultrasonic/Infrared Occupancy Sensor, Model CUI-500-2000, 1350 S. Loop Rd., Suite 104, Alameda CA 94502. 510/337-1000.
2. The Watt Stopper, Model DT-200 with required power pack, The Watt Stopper Inc., 2800 De La Cruz Blvd., Santa Clara, CA 9505. 408/988-5351.

Dimming Control

Provide and install manual dimmers that support the selected dimming ballast, in perimeter offices as designated in reflected ceiling plan.

Installation

Install all low voltage and line voltage wiring necessary to provide a complete manual dimming system in perimeter offices designated in the contract drawings.. Test and adjust all occupancy sensor functions.

END OF SPECIFICATION

DOCUMENT 00440 - PRODUCT AFFIDAVIT FORM

INSTRUCTIONS

IN ORDER TO EVALUATE ENVIRONMENTAL PERFORMANCE OF PROPOSED MATERIALS AND SUBSTITUTIONS, THIS PRODUCT AFFIDAVIT FORM HAS BEEN PROVIDED FOR SUBMITTALS. THE FORM DESCRIBES THE MINIMUM REQUIRED ENVIRONMENTAL PRODUCT PERFORMANCE ALLOWABLE. PERFORMANCE CRITERIA IS LISTED IN THE INDIVIDUAL SPECIFICATION SECTIONS.

FILL OUT THE FORM WHEN PROPOSING SUBSTITUTIONS FOR ANY PRODUCT SPECIFIED WITHIN THE CONTRACT DOCUMENTS. ALL BLANK AREAS MUST BE COMPLETED BEFORE THE PRODUCT CAN BE EVALUATED. SUBMIT THE FORM TO THE PROJECT DESIGNER FOR REVIEW .

PRODUCT INFORMATION

SPECIFICATION SECTION _____

REASON FOR SUBSTITUTION _____

PROPOSED PRODUCT NAME _____

PROPOSED PRODUCT P/N _____

PRODUCT PERFORMANCE

	SPECIFIED	PROPOSED
PERFORMANCE CRITERIA 1.	_____	_____
PERFORMANCE CRITERIA 2.	_____	_____
PERFORMANCE CRITERIA 3.	_____	_____
PERFORMANCE CRITERIA 4.	_____	_____

SUPPORT MATERIALS

- MATERIAL SAFETY DATA SHEET (MSDS) ATTACHED ?
- PRODUCT CATALOG CUT SHEET ATTACHED ?

END OF FORM

**DOCUMENT 00200 - WASTE MANAGEMENT/POLLUTION PREVENTION
PLAN**

GENERAL

THE CONTRACTOR SHALL DEVELOP WASTE MANAGEMENT PLAN BASED ON THE GOALS DISCUSSED BELOW, AND SUBMIT THE PLAN FOR REVIEW AND APPROVAL BY THE OWNER AND TENANT AFTER AWARD OF CONTRACT AND BEFORE BEGINNING DEMOLITION. ONCE APPROVED, THE PLAN WILL BE INCLUDED IN THE CONTRACT DOCUMENTS.

WASTE MANAGEMENT GOALS

THIS PROJECT REQUIRES A PRO-ACTIVE EFFORT TO REDUCE AND RECYCLE DEMOLITION AND CONSTRUCTION WASTE. A DILIGENT EFFORT SHOULD BE MADE TO ACHIEVE THE GOALS DESCRIBED BELOW WHEREVER APPLICABLE IN ORDER TO REDUCE WASTE AND OVERALL DISPOSAL COSTS AND LIMIT THE ENVIRONMENTAL IMPACT OF THE PROJECT.

WASTE PREVENTION

TO THE GREATEST EXTENT PRACTICAL, THIS PROJECT SHALL GENERATE THE LEAST AMOUNT OF WASTE POSSIBLE, USING PROCESSES THAT ENSURE THE GENERATION OF AS LITTLE WASTE AS POSSIBLE DUE TO ERROR, POOR PLANNING, BREAKAGE, MISHANDLING, CONTAMINATION OR OTHER FACTORS. THE CONTRACTOR IS ENCOURAGED TO SEEK ADDITIONAL METHODS TO PREVENT WASTE IN THE FIRST PLACE. FOR EXAMPLE, CHOOSING SUPPLIERS THAT LIMIT PACKAGING, SETTING UP CENTRALIZED CUTTING AREAS TO REDUCE WOOD AND DRYWALL WASTE, AND ACCURATE ORDERING OF SUPPLIES TO AVOID OVERAGE.

REUSE AND RECYCLING

DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT ACTIVITIES SHOULD ACHIEVE A MINIMUM 50% DIVERSION RATE. THE PREFERRED METHOD OF RECYCLING IS ON-SITE SEPARATION OF RECYCLABLE MATERIALS WHICH GENERALLY RESULTS IN LESS CONTAMINATION AND HIGHER RECYCLING RATES THAN COMMINGLED COLLECTION.

MATERIALS REMOVED FROM THE EXISTING STRUCTURES SHALL BE DISPOSED OF BASED ON THE FOLLOWING HIERARCHY, FROM THE MOST TO THE LEAST DESIRABLE.

1. SALVAGED AND REUSED ON SITE.
2. SALVAGED AND DONATED OR SOLD FOR REUSE OFF SITE.
3. SOURCE SEPARATED ON SITE AND RECYCLED.
4. CO-MINGLED AND SORTED FOR RECYCLING BY A RECYCLING HAULER OR FACILITY.
5. ALL NON-USABLE OR NON-RECYCLABLE MATERIALS ARE TO BE DISPOSED OF AS WASTE IN THE MOST ENVIRONMENTALLY SENSITIVE MANNER AS PRACTICABLE.

SUBMITTAL

THE PLAN SUBMITTED FOR APPROVAL SHALL ADDRESS THE FOLLOWING ISSUES:

6. **PLANS FOR THE PREVENTION AND REDUCTION OF WASTE GENERATION, WITH ANALYSIS OF THE DEMOLITION AND NEW CONSTRUCTION WASTES LIKELY TO BE GENERATED, INCLUDING TYPES AND QUANTITIES.**
7. **PROPOSED DISPOSAL METHODS BASED ON THE HIERARCHY IN DISCUSSED UNDER WASTE MANAGEMENT GOALS. MATERIALS HANDLING PROCEDURES INCLUDING INFORMATION ON HOW THE MATERIALS ARE TO BE REMOVED, SEPARATED, AND STORED OR TRANSPORTED FOR REUSE ON OR OFF SITE, RECYCLING, OR DISPOSAL AS TRASH.**
8. **BRIEF COST ANALYSIS IDENTIFYING THE POTENTIAL SAVINGS OR COSTS FOR IMPLEMENTATION OF THE PLAN. WHERE THE SMALL QUANTITY OF MATERIAL, THE EXTRAORDINARILY COMPLEX NATURE OF THE WASTE DISPOSAL METHOD, OR PROHIBITIVE EXPENSE INCURRED IS SUCH THAT RECYCLING OR REUSE WOULD BE IMPRACTICAL OR IMPOSSIBLE, THE CONTRACTOR SHOULD PROVIDE EXPLANATION AS PART OF THE SUBMITTAL.**
9. **SPECIFIC STEPS EXPLAINING HOW THE WASTE MANAGEMENT PLAN WILL BE COMMUNICATED TO THE CREW AND SUBCONTRACTORS AND HOW THE CONTRACTOR WILL ENSURE THAT THE PLAN IS EXECUTED.**
- 5 **RECYCLING AND DISPOSAL OF WASTES FROM BOTH PHASE I AND PHASE II AT THE SAME TIME WHEN NEEDED TO REDUCE TRANSPORTATION AND DISPOSAL COSTS.**

SUBCONTRACTORS

DEMOLITION AND OTHER SUBCONTRACTORS SHOULD BE SELECTED PARTIALLY ON THEIR ABILITY TO MEET THE REQUIREMENTS OF THE WASTE MANAGEMENT PLAN. ALL SUBCONTRACTORS SHALL BE REQUIRED TO PARTICIPATE IN THE WASTE MANAGEMENT PLAN AS PART OF THEIR CONTRACT WITH THE CONTRACTOR.

TARGET BUILDING MATERIALS

THE HANDLING OF THE FOLLOWING ITEMS SHOULD BE ADDRESSED IN THE PLAN.

METALS

10. **STEEL STUDS**
11. **WIRING AND ELECTRICAL EQUIPMENT**
12. **HARDWARE**
13. **DUCT WORK AND HVAC EQUIPMENT**

MISCELLANEOUS MATERIALS

14. **INSULATION**
15. **WOOD**
16. **CARDBOARD**
4. **PACKAGING**

DRYWALL

ALL NEW CONSTRUCTION DRYWALL WASTE AND DRYWALL THAT IS DEMOLISHED SHOULD BE RECYCLED.

CARPET

ALL CARPETING THAT CANNOT BE REUSED SHOULD BE RECYCLED USING THE DUPONT CARPET RECLAMATION PROGRAM BY EITHER DUPONT FLOORING SYSTEMS (MIKE REX, 206-241-022) OR AN EQUIVALENT CARPET RECLAMATION AGENCY.

17. **CERTIFICATION: CARPET REMOVER SHALL CERTIFY IN WRITING THAT USED CARPET WAS REMOVED AND RECYCLED IN ACCORDANCE WITH THE DUPONT CARPET RECLAMATIONSM PROGRAM.**

18. **REMOVE USED BROADLOOM CARPETS IN LARGE PIECES, ROLL TIGHTLY AND PACK NEATLY IN CONTAINER. REMOVE ADHESIVE ACCORDING TO RECOMMENDATIONS OF THE CARPET AND RUG INSTITUTE (CRI). ADHESIVE REMOVAL SOLVENTS SHALL COMPLY WITH CARPET AND RUG INSTITUTE PUBLICATION 104 SUBPARAGRAPH 6.1.9.**

19. **DEPOSIT ONLY CLEAN, DRY USED CARPETS IN CONTAINERS. WHEN AVAILABLE, INCLUDE SCRAP AND WASTE FROM NEW INSTALLATION. CLEAN SHALL BE DEFINED AS CARPET FREE FROM DEMOLITION DEBRIS OR ASBESTOS CONTAMINATION, GARBAGE, AND TACK STRIPS.**

20. **PLACE USED CARPET IN CONTAINER SUPPLIED BY RECLAMATION AGENCY. PLACE ONLY USED COMMERCIAL CARPETING IN COLLECTION CONTAINER. KEEP CONTAINER LOCKED OR SUPERVISED. MAXIMIZE THE AMOUNT OF MATERIAL IN THE CONTAINER. NEATLY STACK CARPET TILES OR**

REPACK IN CARDBOARD BOXES PRIOR TO PLACING IN CONTAINER.

DOORS AND RELITES

ALL DOORS, DOOR ASSEMBLIES, AND RELITES SHALL BE CAREFULLY REMOVED DURING DEMOLITION TO BE EITHER RE-USED ON SITE OR FOR SAFE STORAGE PER THE INSTRUCTIONS OF THE TENANT.

FIXTURES

21. ALL FIXTURES NOT REUSED ON SITE SHOULD BE REMOVED CAREFULLY DURING DEMOLITION AND SALVAGED BY THE CONTRACTOR OR DELIVERED TO EARTHWISE (206-624-4510). FOR RESALE.

TARGET DEBRIS MATERIALS

IN ADDITION TO PROVIDING "ONE TIME" REUSE OR RECYCLING OF DEMOLITION AND CONSTRUCTION MATERIALS, THE WASTE MANAGEMENT PLAN SHOULD PROVIDE FOR CONTINUOUS FACILITIES RECYCLING OF INCIDENTAL CONSTRUCTION AND PERSONAL WASTE (E.G. POP BOTTLES).

THE WASTE MANAGEMENT PLAN SHALL ESTABLISH AND ENFORCE GUIDELINES TO AVOID CONTAMINATION OF RECYCLED MATERIALS BY PERSONAL NON-RECYCLABLE DEBRIS OR NON-RECYCLABLE CONSTRUCTION DEBRIS.

CLEARLY LABELED CONTAINERS FOR RECYCLABLE INCIDENTAL MATERIALS SHOULD BE PROVIDED. AT LEAST FIVE CONTAINERS SHOULD BE PROVIDED FOR THE FOLLOWING MATERIALS:

- 22. PAPERS AND PAPER PRODUCTS
- 23. PAPERBOARD AND CARDBOARD
- 24. PLASTICS
- 25. ALUMINUM
- 26. GLASS

CLOSE-OUT

AT JOB CLOSE-OUT, THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL BE REQUIRED TO QUANTIFY AND SUBMIT IN WRITING THE ULTIMATE DISPOSITION OF ALL DEMOLITION AND CONSTRUCTION MATERIALS. THE SUBMITTALS SHOULD INCLUDE THE FOLLOWING INFORMATION:

- 27. DESCRIPTION OF MATERIAL, TYPE AND QUANTITY.
- 28. DISPOSAL METHOD.
- 29. COST OR BENEFIT.
- 30. TOTAL DIVERSION PERCENTAGE.
- 31. DESCRIPTION OF MATERIALS NOT REUSED OR RECYCLED AND A BRIEF EXPLANATION AS TO WHY IT WAS NOT FEASIBLE TO REUSE OR RECYCLE.

RECYCLING SUBCONTRACTOR

ANY CONTRACTS WITH RECYCLING SERVICE PROVIDERS SHOULD SPECIFY:

- 32. WHAT MATERIALS WILL BE RECYCLED.**
- 33. COSTS ASSOCIATED WITH THE SERVICE.**
- 34. REQUIREMENT THAT WEIGHT OR VOLUME OF RECYCLABLES BE DOCUMENTED.**
- 35. REQUIREMENT THAT THE MATERIAL WILL GO TO A PROPERLY PERMITTED FACILITY.**
- 36. SCHEDULE FOR CONTAINER PICKUP.**
- 37. HOW RECYCLING CONTAINERS WILL BE LABELED.**

RESOURCES

TECHNICAL ASSISTANCE

FREE TECHNICAL ASSISTANCE IN FINDING REUSE OUTLETS OR RECYCLERS, DEVELOPING WASTE MANAGEMENT PLANS, IDENTIFYING WASTE PREVENTION STRATEGIES, CREATING SPECIFICATIONS IS AVAILABLE TO THE GENERAL CONTRACTOR AND THE SUBCONTRACTORS THROUGH:

Ms. ELIZABETH DANIEL
BUSINESS AND INDUSTRY RECYCLING VENTURE
1300 5TH AVE., SUITE 2400
SEATTLE, WA 98101
206-389-7304 FAX: 206-389-7288 ELIZABETHD@SEATTLECHAMBER.COM

PUBLICATIONS

1998 SEATTLE/KING COUNTY CONSTRUCTION RECYCLING DIRECTORY

LISTINGS OF REUSE AND RECYCLING OPTIONS FOR CONSTRUCTION DEBRIS.
ALSO AVAILABLE AT [HTTP://WWW.METROKC.GOV/DNR/SWD/INDEX.HTM](http://www.metrokc.gov/dnr/swd/index.htm)

CONTRACTOR'S GUIDE TO PREVENTING WASTE AND RECYCLING A HOW TO GUIDEBOOK TO PREVENTING WASTE, RECYCLING AND BUYING RECYCLED ON THE JOB-SITE. INCLUDES WORKSHEET TO INCLUDE THE COST-EFFECTIVENESS OF RECYCLING.

END OF DOCUMENT

