

The following Check list is intended for use in project coordination. EACH APPLICABLE ITEM IN THE CHECK LIST SHALL BE INITIALLED WITHOUT FAIL BY THE LEAD FIRM RESPONSIBLE FOR A PARTICULAR PROJECT. Mark items NA that do not apply to the project. This checklist is to be submitted with the Final Review submittal and will become a part of the project documentation.

DIVISION 1 – GENERAL REQUIREMENTS

Initial	Date		
		1.	Check project title, number and issue date. Complete and check all title blocks to match wording of drawing index and specifications. Provide north arrows on all plan sheets.
_		2.	Recheck final drawings with outline specifications and preliminary drawings for conformity to requirements. Reread project program, meeting minutes and other correspondence for pertinent data to be incorporated into Contract Documents.
		3.	Complete detail references and verify the correctness of all references.
		4.	Consultants shall sign and seal their drawings, for final submission and permit sets.
		5.	Date each sheet with the same issue date.
		6.	Check specifications for coordination with drawings and completeness of sections. Check hardware list for panic devices, thresholds, closers, floor hinges and required Fire Underwriters assemblies.
		7.	Advise specification writer of any last-minute changes.
		8.	Project Architect shall check all dimensions and coordinate any discrepancies with all disciplines.
		9.	Detailed plans shall be oriented matching floor and plot plans. Whenever possible, North Arrows shall point to the top or left hand side of the drawing.
		10.	Indicate scale. Provide graphic scales on all drawings.
		11.	Recheck specification references to details.
		12.	Compare architectural finish schedule to specification index. Ensure all finish materials are specified.
		13.	Check major items of equipment and verify that they are coordinated with contract drawings. Pay particular attention to horsepower ratings, phasing and voltage requirements.
		14.	Verify that items specified "as indicated" or "where indicated" are in fact indicated on contract drawings.
		15.	Verify that cross-referenced specification sections exist.

Initial	Date		
		16.	Recheck codes for:
			 A. No & type of needed plumbing fixtures B. Drinking fountains required C. Fire Hose and Extinguisher cabinets required D. Automatic fire sprinkler extent E. Smoke detection and emergency lighting F. Exits, stair design and handrails needed G. ADA compliance
_		17.	Review security provisions with Northwest, i.e. – security hardware, lighting, T.V. surveillance, fencing and alarm systems.
		18.	Complete code search and and provide code foot print data on drawings.
		19.	Check and verify that <u>all</u> applicable regulatory agencies have reviewed and approved the final drawings.
		20.	Check and verify all items indicated and noted Not In Contract, (N.I.C.) on the drawings.
		21.	Check specs for bid items. Are they coordinated with the drawings?
		22.	Check specs for phasing of construction. Are the phases clear?
		23.	Verify all plans and specifications are compliant with Northwest's Guidelines for Design and Construction (GDC)
		24.	Verify instructions for creating IFB have been followed.
DIVISIONS	31 - I 32 - I	EARTH	G CONDITIONS WORK IOR IMPROVEMENTS ES
		1.	Indicate "Construction Limits", "N.I.C." work and construction barricades, if needed. Indicate contractor's access to the site where required.
		2.	Show property lines, bearings, overall dimensions, street dimensions, easements and bench marks. Relate finished floor elevations to established datum.
		3.	Show existing and finish contours topographic survey and any existing facilities to remain.
		4.	Check finished grades with finished floor elevations indicated.
		5.	Dot-in "future buildings" on architectural, mechanical, electrical and civil plot plans and title each building within its outline.

Initial	Date		
		6.	Include legal description on site plan.
		7.	Note types of paving and areas requiring "selected base"; note thicknesses needed.
		8.	Note heights and extent of fencing – both existing and new. Note size and type of gates.
_		9.	Check details for drainage structures, curbs, driveways, entrance posts and chains. Provide tees in S.D. lines for future connections. Note <u>inlet</u> and <u>invert</u> elevations on catch basins, manholes and drain lines.
		10.	Verify flagpole locations and heights.
		11.	Indicate test hole boring locations on civil or structural drawings. Include log of soil borings in specifications. "For Information Only". Datum of boring samples shall be coordinated with datum on grading plans.
		12.	Note items for removal and demolition.
		13.	Check all utility lines for interference with existing and new services.
		14.	Note areas to receive "topsoil" and depths of soils required. Check availability of topsoil on the site .
		15.	Check for adequate drainage of all floored, walled or curbed planting areas adjacent to buildings within plazas and courtyards.
		16.	Verify extent of off-site work in contract. Indicate extent of concrete paving, walks, curbs and bituminous paving.
		17.	Indicate and note existing and new walks, curbs and planting areas.
		18.	Note existing trees as to size, type and whether they are to be saved or removed.
_		19.	Indicate on site plan transformer enclosures, meter locations and any other underground vaults required by utility companies. Check main conduit and supply line sizes and locations. Check fire protection requirements and hydrant locations.
		20.	Show north arrows, vicinity map and graphic scales where required.
		21.	Check soils report for problem areas.
		22.	Indicate "Bench Mark" on plot plan. (i.eDatum 290.5 or 290' –6"). All elevations must relate directly to datum.
		23.	Indicate locations for concrete parking bumpers, markings for parking, entrance and exit signs and arrows.
		24.	Show existing irrigation lines to remain. NOTE: Specify existing lines to be "abandoned" or "removed".

Initial	Date		
		25.	Check on disposition of excess earth and existing rocks to be used in landscaping.
		26.	Check that proper fill and compaction under future structures have been provided.
		27.	Indicate types and extent of headers needed to receive pavement.
		28.	Check requirements for Fire Department equipment access to site and buildings.
		29.	Provide adequate slopes away from building for proper positive drainage.
		30.	Verify that all utility easements are shown.
		31.	Limit entrance walks to comply with ADA.
		32.	Check retaining walls for location, height and bearing condition.
		33.	Check old survey, if available, to determine if site has been filled in.
		34.	Verify that planting areas do not drain across pedestrian traffic areas.
		35.	Storm drainage systems shall have the following indicated; size and type of pipe, rate of slope, invert elevation at each change in rate or direction of slope, elevation and depth of catch basins, manholes and junction chambers, sizes of culvert.
		36.	Check points of sewer connection to the building systems. Show dimensions for staking and construction of entire storm drainage system.
		37.	Storm drain lines with less than 1' –0" of cover over top of pipe shall be encased in concrete or require special design.
		38.	Check that concrete paving of required thickness has been provided at loading dock locations.
		39.	Indicate how drainage is to be accomplished across finished areas such as roads and walks, where "springs" occurs in cut areas.
		40.	Where soils reports indicated sub-surface water, indicate proposed methods for drainage around sub-surface structures.
		41.	Indicate well points and discharge methods for sub-surface water indicated.
		42.	Indicate location of wetlands and required buffer areas.
		43.	Indicate and coordinate size, location and invert elevation of building water, sewer and storm drain service connections.
_		44.	Verify from site plans that new or old underground utilities (power, telephone, fiber, water, sewer, gas, storm drainage, fuel lines, grease traps, fuel tanks) have been checked for interferences with foundation.
		45.	Verify property lines and location of foundations and footings in relation to property lines.

DIVISION 3 – CONCRETE

Initial	Date		
		1.	Depress slabs as required to receive floor materials: ceramic tile, terrazzo, spring floors and walk-in refrigerators. NOTE: Where thinset floors are used direct to structural slab, provide thresholds.
		2.	Note floor slopes to drains – give elevation of high and low points.
		3.	Schedule "non-slip" floors in shower and locker rooms, kitchens and shops. Provide non-slip nosings on stairs and non-slip material on treads. Check slabs for any special wearing surface requirements.
		4.	Chamfer or "ease" all corners of exposed concrete. Check precast details for proper jointing, anchorage, waterproofing and fireproofing.
		5.	Indicate elevations at top of footings on structural drawings.
		6.	Provide rock fill under slabs on grade if required by soils report. Check foundation drainage requirements.
		7.	Indicate and detail construction and expansion joints. Coordinate with structural. Determine if slip-dowels are required between slab panels. Check waterproofing where joints occur in exterior double slabs.
_		8.	Provide platforms at exterior doors on unpaved grade. Make wide enough to accept 180 degrees door swings. Provide door pockets or dowel slabs to prevent heaving. Verify net opening width for doors having panic hardware.
		9.	Detail interlocking joint at knit sections in tilt-up construction and precast panels to form water-bar. Review joint and sealant details.
		10.	Exterior platforms and courtyard slabs shall slope to drain away from buildings.
		11.	Schedule and note on drawings extent of colored, non-slip and special textures.
		12.	Show and note areas to receive special textures on elevations.
		13.	Provide a minimum of 8" high curbs or pads above finished roof under all mechanical and electrical equipment. Check mechanical for concrete pad locations for roof-mounted equipment.
		14.	Check to assure floors drain in shower, locker rooms and toilet areas.
		15.	Double check concrete and masonry opening sizes noted on drawings.

Initial	Date		
		16.	Check for proper design, rise and run for exterior "monumental stairs".
		17.	Check that sufficient "weep holes" are provided in retaining walls to relieve hydrostatic pressures, with proper drainage board.
		18.	Check concrete sections with architectural details for required reglets, rabbets and recesses to receive various finishes.
		19.	Check that required curbs, trenches, pits and sumps are provided to satisfy building requirements.
		20.	Detail and reference typical control and expansion joints.
		21.	Reinforced Concrete
			A. Is type of reinforcement splice or lap indicated?
			B. Are corner reinforcement bars specified?
			C. Is seismic detailing required?
			D. Check that column ties are used in added column/beam or column/beam slab joints.
			E. Are accessories galvanized or plastic tipped?
		22.	Are classes of concrete for the various items of work shown in notes? And specifications?
		23.	Are specifications for reinforcing steel included in notes?
		24.	Are base courses and capillary water barriers shown under floor slabs- on-grade and checked with foundation design criteria?
		25.	Are slab-on-grade floor thicknesses given? Reinforcement shown?
		26.	Are crack control joints located in all interior and exterior slabs on grade?
		27.	Provide thickened slab-on-grade under masonry partitions.
		28.	Are re-entrant corners of floor slab cutouts reinforced?
		29.	Is concrete cover over reinforcing steel shown or noted?
		30.	Has mesh reinforcement in slabs been specified in general notes or drawings for slab-on-grade and/or pan joist construction?
		31.	Are minimum required areas of steel provided in walls, beams, columns as required by ACI 318.
		32.	Are depressed slabs shown for tile floors, etc?
		33.	Are cross section details of depressed slabs shown with reinforcing detailed?

Initial	Date			
		34.	Are pe	rimeter felt joints and premolded joint fillers correctly located and out?
		35.		inforcing steel been detailed to avoid congestion? In column joints?
		36.	Has sto	eel been detailed to avoid long lengths of bars extending from
		37.	Are dia	agonal bars provided at openings in walls, floors, and roof?
		38.		construction joints been provided for stairs so they may be ucted after floors are in place?
		39.	Concre	ete Design Mix
			A.	Check against specification for cement content, slump, additives, etc.
			B.	All exposed concrete to be air-entrained.
			C.	How flat, level is concrete work to be?
			D.	Is fly ash permitted and to what percentage?
			E.	Concrete testing requirements to be furnished.
			F.	Is inspection of concrete work specified or required?
			G.	Formwork – any stripping requirements? Who is responsible?
			H.	Is a concrete curing compound, cold-hot weather, placement, etc. required.
			l.	Testing requirements – spelled out clearly.
FOUNDATION	<u> </u>			
Initial	Date			
		40.	Are all possib	footings located to provide concentric loading as closely as le?
		41.		g schedule should be used for continuous wall footings and ual footings.
		42.	Are top	o of footing elevations shown?
		43.	Are fou	undation ties shown in seismic areas, if required?

Is bracing and shoring required? Noted?

Are rigid frame ties shown?

Are waterstops shown?

44.

45.

46.

Initial	Date		
		47.	Wall reinforcing schedule should be used. Is reinforcing shown on sections in correct face of location?
		48.	Is footing steel located in bottom for spread footings and top and bottom for combined footings?
		49.	Is horizontal steel interrupted by beam or column pockets? If so, add supplementary steel?
		50.	Compare wall steel versus wall height. Is more steel required for greater height walls?
		51.	Does foundation wall have steel in both faces? Should it?

DIVISION 4 - MASONRY

Initial	Date			
		1.	Indicat	te sizes of masonry units, required bonding and jointing.
		2.	Detail	waterproof finish at tops of all parapet walls and yard walls.
		3.	concre	e control joints spaced every 25' to 30' to allow for shrinkage in ete block construction. NOTE: In brick work locate control joints 50' maximum. Provide control and expansion joint details.
		4.	Check	code requirements for anchorage of masonry veneer materials.
		5.	Check	waterproofing requirements and details for exposed masonry.
		6.	Relate	dimensions to masonry unit sizes, joint sizes and type of bonding.
		7.	Relate openin	masonry coursing and dimensioning to door and windowngs.
		8.	Is type	of mortar specified (S-type, N-type)?
			A. B.	Are mix proportions specified-sand, cement, lime, etc? Is mortar to be tested? If so specified, test standards to be used.
		9.	If wall	bearing project, specify CMU and brick strength = fm.
			A.	1500 p.s.i. normal strength block.
			B.	3500 p.s.i. high strength block.
			C.	Specify brick strength.
			D.	Is block or prism test to be performed?
		10.	Is mas	conry construction to be inspected?

Initial	Date		
		11.	Are walls to be reinforced? If so, specify size and spacing of rebars- detail of placement of bars. Foundation walls with lateral loads are to be reinforced. Horizontal joint reinforcing size and spacing.
		12.	Are control joints spaced as required by the following mandatory rules?
			A. To coincide with floor joints for walls and slabs?
			B. To avoid locations under concentrated loads?
		13.	Have details of nonstandard construction been provided; e.g. bond beam intersections at different levels.
		14.	Are locations of intermediate bond beams shown on sections and wall elevations?
		15.	Has steel angle lintel schedule been used?
		16.	Are shelf angles required for brick? Properly located and anchored?
		17.	Anchors for floor/roof joists, beams, etc. properly located and detailed?

DIVISION 5 – METALS, STRUCTURAL AND MISCELLANEOUS

GENERAL

Initial	Date		
		1.	Note types of metal decking on structural drawings. Verify extent and amount of fireproofing required on structural steel.
		2.	Note cross-walk drains, trench pit covers and gratings. Note "non-slip" surfaces.
		3.	Show steel ladder and iron rung locations.
		4.	Check that proper gauges for metals have been noted on details.
		5.	Provide and detail lateral bracing for freestanding library stacks and shelving.
		6.	Provide divider railing between pairs of exterior doors separated by a mullion.
_		7.	Indicated sizes and types of letters and numbers shown on elevations. Verify if a building plaque is required. If so, discuss allowance with Northwest PM.
_		8.	Check if flashings, gravel guards, gutters, leader heads, scuppers, downspouts, splash plans, roof vents, openings, and hatches have been specified and detailed.

Initial	Date				
_		9.	Check details for water-tightness and proper detail indication for roof specialties.		
		10.	Check mechanical for net louver sizes required. (Take into account loss due to blades and frame). NOTE: Screen exterior louver openings. Louvers shall be detailed by Architectural.		
		11.	Check sizes of smoke vents and roof hatches for equipment removal.		
		12.	Provide closures at exposed ends of wall flashings.		
		13.	Show mechanical equipment, fresh air intake and exhaust vents on architectural roof plan. NOTE: Provide ladders or other means of access for serving roof-installed mechanical equipment.		
		14.	Provide housing and "view screens" to hide roof-mounted mechanical equipment. Check sight lines and clearly explain significance to Owner.		
		15.	Show combustion air louvers. Check where required and verify exact size with Mechanical.		
		16.	Provide handrails at ramps.		
		17.	Railings at platforms and balconies shall be as required by ADA. NOTE: Return handrails to wall at ends of stairway runs.		
		18.	Check specifications for ferrous metals to be galvanized. Call out gauges of metals on details. Specifications will cover minimum allowable thicknesses.		
		19.	Iron rung ladders: Provide 7" clearance from rung to wall surface. Space rungs at 12" o.c. Check industrial safety rules for long runs, landings and protective guards.		
		20.	Verify types of locking devices for gates. If cylinder locks are used, master key to project system.		
		21.	Detail structural support for mechanical and electrical equipment.		
		22.	Show typical detail for framing floor and roof openings.		
STRUCTURAL	L STEEL	=			
Initial	Date				
		23.	Are materials required clearly shown or called for in general notes?		
			A. Steel?		
			B. Bolts-size, number, type?		
			C. Anchor bolts?		
		24.	Are structural steel connections to concrete or masonry shown?		

Initial	Date			
		25.	Are an	chor bolts lengths shown?
		26.	Are stu	ud connectors for concrete slab connections to steel beams ?
		27.		ember's forces, axial loads and end reactions shown for all ctions that are to be designed by the fabricator?
		28.		ze and number of bolts shown for connections to be detailed on lrawings?
		29.	Are gu symbo	sset plate thicknesses given? Are all welds shown by AWS
		30.		ress diagrams given for trusses that are not shown on detailed ctions?
		31.	Are pu	rlin and girt sag rods provided where required?
		32.	Are pu	Irlin and girt connections shown?
		33.		e purlin and girt connections prevent purlin overturning on sloped and side walls?
		34.	Are op	enings framed to carry wind loads?
		35.	Are we	eld returns provided as required to prevent joint "unraveling"?
		36.	Colum	ns:
			A.	Elevation, bottom of base plate.
			B.	Number, size, length and orientation of anchor bolts.
			C.	Base plate size, orientation and connection to column.
			D.	Size
			E.	Steel grade
			F.	Milled surfaces
			G.	Column splice detail
		37.	Beams	3
			A.	Elevation top of beam
			B.	Size
			C.	Steel grade
			D.	Connection

Initial	Date			
			E.	Studs size, length after welding, spacing
			F.	Camber (if any)
			G.	Bricks plates (if any)
			H.	Are spandrel beams subject to torsion?
		38.	Steel C	onnections
			A.	All welds sizes, lengths and types must be shown
			B.	Electrode type must be shown
			C.	Bolts, size, grade, friction, bearing, threads in shear plane, threads not in shear plane
			D.	Wrench clearance
			E.	Check wrench calibration
DECKING				
Initial	Date			
		39.		uired structural properties of floor and roof decking provided and ated with the project specification?
		40.	Are dec	cking fastener spacings adequate to develop diaphragm shear nce?
		41.	Are gag plans?	ges and depths of metal decking and metal roofing shown on the
		42.	Is weldi	ing pattern specified?
		43.	Is deck	ing supported at columns?
STEEL DECKI	NG			
Initial	Date			
		44.	Are dep	oth, gauge and type indicated?
		45.	Check t	type of roof insulation to span rib width.
		46.	Continu designs	ious over three spans – if not, check single span and two spans.
		47.	Side lap	o attachments (type and spacing)

		48.	Welding pattern – Side laps, end laps/standard
		49.	Closure in ribs
		51.	Are sheet metal pour stops shown?
STEEL JOIST	<u>s</u>		
Initial	Date		
		52.	Alignment of panel points – call out in notes
		53.	Ceiling extension (bottom chord)
		54.	Depth of bearing end
		55.	Size and spacing shown
		56.	Type of bridging and spacing
		57.	Special connection required when joist frames into column flange or web?
		58.	Brace continuous beams bottom flange at first joist each side of column by extending bottom chord angles.
DIVISION 6 -	CARPE	NTRY	
Initial	Date		
Initial	Date	1.	Verify locations for gypsum board fire-rated separations.
Initial 	Date	1. 2.	Verify locations for gypsum board fire-rated separations. Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring.
Initial 	Date		Indicate necessary furring for mechanical and electrical work. Note
Initial	Date	2.	Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring.
Initial	Date	2.	Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring. Note anchorage and blocking for cabinets. Provide access panels needed for mechanical and electrical services.
Initial	Date	 3. 4. 	Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring. Note anchorage and blocking for cabinets. Provide access panels needed for mechanical and electrical services. All access panels should be shown on Architectural. Verify and indicate required "sound-retardant" partition locations. Verify
Initial	Date	 3. 4. 5. 	Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring. Note anchorage and blocking for cabinets. Provide access panels needed for mechanical and electrical services. All access panels should be shown on Architectural. Verify and indicate required "sound-retardant" partition locations. Verify conditions above ceiling line between rooms for sound separation.
Initial	Date	 3. 4. 6. 	Indicate necessary furring for mechanical and electrical work. Note heights and extent of furring. Note anchorage and blocking for cabinets. Provide access panels needed for mechanical and electrical services. All access panels should be shown on Architectural. Verify and indicate required "sound-retardant" partition locations. Verify conditions above ceiling line between rooms for sound separation. Provide attic draft stops and ventilation as required by code. Provide 1" min. clearances around perimeter of wood floors on sleepers

Initial	Date		
		10.	Check flame spread rating requirements for wood wall paneling.
_		11.	Check that, where camber is required for structural members such as glu-lam beams, the amount is noted on detail and drawing. For drainage purposes, do not assume that structural cambers on "dead-level" roofs will disappear under dead loads only.
		12.	Indicate and note required thermal insulation locations in walls, ceilings and shafts.
		13.	Note roof slopes. Check required clearances of exhaust ducts with openings and flues with structure.
		14.	Indicate stud sizes and spacing.
		15.	Note proper depths of furring for plumbing and other recessed items.
		16.	Verify required appearances grade for laminated wood members.
		17.	Verify that blind nailing has been specified for all finished wood surfaces.
		18.	Verify if sink rims are to be specified or if units are self-rimming type.
		19.	Verify millwork is detailed and dimensioned.

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

Initial	Date		
		1.	Note "membrane waterproofing" on exterior walls where grade line is above finished floor levels.
		2.	Indicate types of roofing and typical roof construction on roof plan. Cut sections on roof plan showing where to find details.
		3.	Provide overflow scuppers adjacent to roof drains. Check scupper heights above roof drains, 2" maximum allowable.
		4.	Check roof and terrace areas for proper drainage. Indicate slopes, drains and overflow scuppers. 1/4" per foot minimum slope.
		5.	Allow a minimum of 8" from roof to top of base flashing.
		6.	Verify types and thicknesses of roof insulation. Verify if attic ventilation is required.
		7.	Provide walkways from roof access to mechanical equipment on composition roofs.
		8.	Provide detail sections at each location of roof penetration, equipment supports and screen supports.
		9.	Indicate type and finish of copings and gravel stops.

DIVISION 8 – OPENINGS

Initial	Date		
		1.	Scheduled labeled fire door assemblies and panic hardware locations. Verify masonry openings required by doors having panic hardware.
		2.	Provide metal plaster stops around perimeter of door frames in plaster walls.
		3.	Indicate gauges of metal frames in specifications.
		4.	Check overhead doors for clearances with ductwork and piping. Verify labeled conditions.
		5.	Check size and location of door louvers with Mechanical Engineer.
		6.	Provide louvers or undercut doors where required by mechanical. Provide fusible-linked louvers in labeled doors.
		7.	Do not provide louvers in doors to individual toilet rooms next to offices or lounge.
		8.	Schedule standard width and height doors. (Do not use special sizes.)
		9.	Exterior receiving doors to kitchen and service areas to be 3' –6" minimum width. Check door sizes required for clearance of equipment, casework and furniture.
		10.	Check room areas to determine if panic hardware is required. Check required exit and capacity sign for occupancy involved.
		11.	Single doors requiring panic hardware that do not open 180 degrees shall be oversized to allow for clearances of hardware beyond required exit width. Check applicable code.
		12.	Provide view windows in doors to stairways as required by applicable code.
		13.	Check support details for folding doors and partitions.
		14.	Verify U. L. label requirements for doors into Transformer Rooms and Vaults.
		15.	Where sound rated doors occur, provide sound-seals and surface-mounted closers.
		16.	Check glass schedule – make sure type of glass for each opening is indicated.
		17.	Check to verify all hollow metal frame types are drawn, dimensioned and detailed.

Initial	Date		
		18.	Verify sizes of mechanical and electrical equipment relative to doors sizes provided. In general, provide 6' –0" door opening to main mechanical rooms.

METAL DOORS AND WINDOW WALLS

Initial	Date		
		19.	Check window details for interference with structural members.
		20.	Check venting sash for headroom clearances.
		21.	Check anchorages details with structural.
		22.	Note "sealants" on details at perimeter of door and window frames.
		23.	Indicate by legend or symbol "insulated" and "non-insulated" panels on elevations and details.
		24.	Verify and schedule screens where required.
		25.	Draw only general outline of window wall members. Indicate required anchorage and structural stiffeners required. Verify stiffener sizes with structural.
		26.	Check depths required for drapery tracks. Provide necessary backing for anchorage.
		27.	Check that stock size sections have been specified and detailed.
		28.	Define extent of mock-up required for testing.

GLASS AND GLAZING

Initial	Date		
		29.	Screen mirror sight lines into toilets.
		30.	Check availability and Code restrictions on large glass sizes.
		31.	Check locations for medicine cabinets, display cabinets and building directories.
		32.	Check window guards, wire glass and fire window locations.
		33.	Check mirror sizes and setting heights. Use stock sizes where possible.

		34.	Note glass types on elevations.
		35.	Provide safety rail and tempered plate glass at hazardous locations. Sliding glass doors and glazed exit doors to have safety glass.
		36.	Check shading conditions, edge area and recommended maximum sizes for heat and glare reducing glass.
FINISH HARD	WARE		
Initial	Date		
		37.	Check floor hinge pockets for clearance with reinforcing. Swing exit doors 180 degrees where possible.
		38.	Indicate any floor hinges on sill details.
		39.	Omit "hold-open areas" on doors serving air conditioned spaces.
		40.	Make careful check of hardware requirements. Check Owner's keying requirements. Verify specified finishes and designs with Owner.
		41.	Check that thresholds are mitered and returned at projecting ends beyond jamb and mullion.
		42.	Check to see that hardware complies with ADA Requirements.

DIVISION 9 – FINISHES

LATHING, PLASTERING, FURRING AND GYPSUM BOARD

Initial	Date		
		1.	Call out metal screeds and expansion joints on elevations. Detail lath interruptions at expansion joints.
		2.	Note size and spacing of studs on drawings. Indicate types and thicknesses of gypsum board and plaster.
_		3.	Provide resilient clips on studs to receive lath at rooms next to toilets and mechanical rooms and where recommended for acoustical reasons. (Do not use perforated lath where clips are used).
		4.	Use 3/8" stripping or self-furring lath on solid wood members to receive lath and plaster.
		5.	Extend vertical metal expansion screeds to grade without interruption. Horizontal ones to butt verticals. Limit plaster areas to approx. 144 sq. ft. on exterior surfaces.
		6.	Space soffit plaster screeds at 12' o.c. max.
		7.	Back-plaster expansion joints in fire rated walls.

Initial	Date		
		8.	Check fire protection for structural steel columns, beams and steel stairs.
		9.	Indicate UL design numbers for all fire rated assemblies.
		10.	Verify allowable unbraced height for drywall partitions and specify bracing method where required.
RESILIENT FL	OOR A	ND WAL	L COVERINGS
Initial	Date		
		11.	Indicate on drawings any special floor or wall patterns.
		12.	Note edge strip between resilient flooring and other types of flooring
		13.	Indicate and schedule extent of vinyl and laminated plastic wall coverings.
TERRAZZO, T	ILE ANI	D COMP	OSITION FLOORING
Initial	Date		
		14.	Schedule and indicate on plan extent of non-slip floors: showers, shops, locker rooms and exterior locations.
		15.	Indicate extent of flooring and wainscoting materials on drawings.
		16.	Indicate floor slopes and drain locations.
		17.	Where concrete bases are provided to take equipment, check base heights with size of tile to be used.
		18.	Note floor recess for mortar setting beds.
		19.	Use non-slip tile in all public areas.
		20.	Verify that required trim shapes are manufactured for tile before detailing. Verify for all tile manufacturers specified.
<u>CEILINGS</u>			
Initial	Date		
		21.	Compare ceiling plan with mechanical and electrical drawings. Adjust to avoid discrepancies and conflicts.
		22.	Compare ceiling plan with finish schedule. Look for discrepancies.
		23.	Check to see that each ceiling type is clearly indicated.
		24.	Check to see that all ceiling heights are clearly indicated.

Initial	Date		
		25.	Check for allowed openings in fire rated ceilings.
DIVISION '	10 – SPECIA	ALTIES	
Initial	Date		
		1.	Note vinyl or other covering on sound-retardant folding partitions.
		2.	Provide OSHA compliant access to mechanical roof equipment.
		3.	Verify heights for cabinetwork and equipment. NOTE: Check anchorages for cabinetwork.
		4.	Show locations for capacity signs on plan and verify where required by Northwest EHS.
		5.	Verify toilet room accessories with Owner.
		6.	Use stock sizes for toilet stalls and mirrors. Check uniform finish on accessories, i.e. – "satin finish", "dull-chrome", "polished".
		7.	Indicate fire extinguisher and cabinet locations.
		8.	Check ADA requirements, e.g. grab-bars, toilet compartments, etc.
DIVISION '	11 – EQUIP	MENT	
Initial	Date		
		1.	Check N.I.C. equipment noted on drawings with specifications. Verify utility needs for Owner furnished N.I.C. equipment.
		2.	Check range hoods for lateral bracing, filters, frames and grease gutters. Check codes for exhaust shaft construction. Check M & E for lights and fans.
		3.	Provide protective covering over plaster where ranges abut walls.
		4.	Provide solid blocking for curtain track.
		5.	Dot-in "Separate Contract" work.
		6.	Check equipment for conflict with ductwork, piping, lighting and structural. Check safety requirements.
		7.	Provide bleacher guardrails as required by ADA, Industrial Safety, OSHA and codes.
		8.	Check for required fire separation for kitchen areas.
		9.	Check clearances for kitchen equipment.

Initial	Date		
		10.	Kitchen and restaurant: Check health and building code for floor, wall and ceiling finishes, screens, fans, extinguishers, toilet room separation, lavatories in kitchen, grease trap and floor sink. Check slab recess and insulation at walk-in refrigerators.
DIVISION 12 -	- FURNI	SHINGS	
Initial	Date		
		1.	Check codes for required aisle widths in assembly areas.
		2.	Verify required flame spread ratings for all furnishings.
DIVISION 13 -	SPECIA	AL CON	STRUCTION
DIVISION 14 -	CONVE	YOR SY	STEMS
DIVISIONS 21	- FIRE S	SUPPRE	SSION, 22 - PLUMBING, 23 - HVAC, 24 - INTEGRATED AUTOMATION
Initial	Date		
		1.	"Rough-in" for N.I.C. and future equipment.
		2.	Check fixture setting heights, ADA requirements. Provide backing and support for all fixtures.
		3.	Check combustion and fresh air louvers for size and location. Show BTU capacity of heaters and boilers on drawings.
		4.	Check transfer duct sizes and locations, proper insulation and isolation of toilet room noise. Coordinate with Architect.
		5.	Check mechanical equipment and piping for clearance with architectural and structural.
		6.	Check sink sizes with cabinet details.
		7.	Check if any installation is connected to the domestic water supply whereby the plan, arrangement, connection, maintenance or installation is such as to make possible the contamination or pollution of the water supply.
		8.	Notify architect about need and sizes of roof hatches or removable louvers for equipment removal. Check sound and vibration isolation. Check sprinkler riser and line locations.
		9.	Check sprinkler, smoke and fire damper locations. Verify types of sprinkler heads and dampers.
		10.	Check that exterior equipment, ductwork and motors are specified "watertight".

Initial	Date		
		11.	Provide lateral bracing and support for tanks and suspended heaters.
		12.	Check ductwork for clearances with architectural, structural, electrical, sprinklers and equipment.
		13.	Provide access panels to fusible links and strip heaters at ductwork.
		14.	Check locations of exterior and interior hose bibbs and need for anti- freeze type.
		15.	Check dielectric couplings for dissimilar metal pipes.
		16.	Provide at least one hose bibb and floor drain in each locker and gang toilet area.
		17.	Provide sound insulation in ductwork around toilets and as required.
		18.	Check hangers and supports for equipment with structural, clearly indicating size of members, bolts, etc.
		19.	Check architectural for required fixtures, drains and downspouts. Coordinate locations.
		20.	Check headroom at ducts, pipes and furring.
		21.	Provide mechanical ventilation of toilet rooms despite window ventilation.
_		22.	Check architectural for hose cabinet locations. Verify extent of each group occupancy on plan. Check locations of wet and dry standpipes and of fire gongs with architectural.
		23.	Define on drawings extent of heating, ventilating and air conditioning zones.
		24.	Notify architect of furring required for mechanical items.
_		25.	Provide garbage can wash for major kitchens. Verify if can wash should be under roofed area if located on exterior. (Storm water not allowed in sanitary sewer).
		26.	Check storm drainage for Code required hook-up of roof drains. Check locations.
		27.	Check architectural for hook-up and rough-in for items in separate contracts.
		28.	Notify structural of concrete pads and openings required for mechanical and electrical equipment.
		29.	Notify electrical consultant of mechanical equipment and motors requiring electrical service.

Initial	Date		
		30.	Check installation requirements of gas, water and sewer hook-ups, meters and service.
		31.	Provide pressure relief valve for each hot water heater.
		32.	Clarify extent of chrome plating on exposed piping. Check specifications.
_		33.	NOTE: Do not use copper tubing for down-spouts in furred ceiling areas, unless wrapping is provided to eliminate condensation.
		34.	Verify relationship of underground piping to footings, grade beams and piling.
		35.	Provide floor drain adjacent to banks of wall hung urinals and adjacent to toilet stalls in women's toilets.
		36.	Provide access panels to plumbing valves.
		37.	Verify stack heights, sizes and clearances from other materials.
		38.	Check that fan rooms have been located on outside walls with direct fresh air intake.
		39.	Check that crawl spaces and elevator shafts have been ventilated.
		40.	Check thermostat locations and heights relative to fixtures and built-ins.
		41.	Check that shafts and other openings have been provided and properly located on the structural drawings.
		42.	Show typical detail for location and height of thermostats. Review with architect.
		43.	Provide instructions for water treatment required for boilers and provide requirements for the start-up and use of boilers during construction.
		44.	Verify selected water chilling unit will fit outside, allowing room for maintenance and service, tube-pulling and clearance from electrical and other items.
		45.	Note on drains minimum clearance to overhead pipes and ductwork above drives.
		46.	Provide hose bibbs in chiller and fan rooms.
		47.	Check drains for planter areas.
		48.	Check reflected ceiling plans for relationship of ceiling grilles and access panels to lighting fixtures.
		49.	Provide water and drain for vending machines.

Initial	Date		
		50.	Check that "grease ductwork" from range hood is welded. Check codes for required fire protection.
		51.	Check sleeve locations for fire sprinkler lines. (Located in middle 3 rd of beams and as approved by structural engineer).
		52.	Provide adequate clearances around fan room equipment for servicing . NOTE: 15" minimum on exterior sides of units for access to bearings, etc. 10" minimum on other side for access to belt-guards, pipe connections, etc.
		53.	Verify sound attenuation requirements for ductwork.
		54.	Check clearances with structural, ducts piping and electrical fixtures.
		55.	Verify code requirements for exhaust ducts and fans at kitchen range hoods.
		56.	Check that thermostats are appropriately placed.
		57.	Check that required condensate lines and floor sinks have been provided.
		58.	Provide mechanical supply and exhaust to telephone equipment rooms, machine and switchgear rooms.
		60.	Verify water flow test data is current.
DIVISIONS 26	– ELEC	TRICAL	., 27 - COMMUNICATIONS, 28 - ELECTRONIC SAFETY AND SECURITY
Initial	Date		
		1.	Check "rough-in" for N. I. C. items.
		2.	Check switch locations at door swings.
		3.	Check fixtures for furring depth, clearances at doors, rated recessed housings, interference with above-ceiling obstructions such as mechanical.
		4.	Check electrical needs of fixtures for usage, design, size and setting heights.
		5.	Check conduit at metal decking. Do not run in rigid insulation.
		6.	Check wall thicknesses and furring for panels, outlet boxes, conduit, etc.
		7.	Verify outlet and switch locations relative to mirrors, bulletin boards, whiteboards and counter top splashbacks.
		8.	Check required single-phase and 3 phase power and location of service to property.

Initial	Date		
		9.	Indicate electrical, data, signal and telephone panels on architectural, plumbing, fire protection and mechanical plans.
		10.	Check light pattern in arcades and covered walks for conflict with other elements.
		11.	Check telephone, data and TV outlets with Owner.
		12.	Check fire alarm and FHC with architectural.
		13.	In exposed construction, check fixture locations with architectural and structural.
		14.	Check lighted exit sign locations.
		15.	Check code required emergency lighting.
		16.	Check electrical runs and outlets with movable and glazed partitions, furniture layouts, base heights and partition depth.
		17.	Verify electrical load requirements including that of N.I.C. equipment.
		18.	Provide weatherproof housing for motors exposed to the elements. Check specs.
		19.	Verify and define if service during construction is Contractor or Owner expense.
		20.	Specify "weathertight and waterproof" outdoor wiring and connections.
		21.	Check electrical hook-up for mechanical equipment, line voltage, low voltage and controls.
		22.	Verify conduit sizes accommodate wiring and conform to electrical codes.
		23.	Check flexible couplings at seismic joint.
		24.	Check that fixtures are independently supported in suspended ceiling.
		25.	Provide means for relamping/servicing all fixtures, particularly those 12' or more above floor.
		26.	Check location and types of exit signs to be used, e.g. recessed, pendant, single or double-faced and directional arrows.
		27.	Check exterior lighting for compatibility of color and proper location of fixtures.
		28.	Check reflected ceiling plans for proper relationship of lighting fixtures to air conditioning grilles.

Initial	Date		
		29.	Check if smoke detection system has been reviewed for Code requirements.
		30.	Where telephone service is installed in ceiling areas, check with Northwest IT for their requirements.
		31.	In kitchen areas, run service conduits above ceiling or below floor rather than in structural slabs.
		32.	Check door schedules for doors requiring security switches.
		33.	Check that electrical outlet boxes have not been located back-to-back in sound retardant partitions.
		34.	Where heavy decorative fixtures are used, check for proper anchorage and support.
		35.	Indicated lights that are to be on night-light security system.
		36.	Verify Northwest IT space requirements for phone and data equipment.
		37.	Provide power for automatic landscape irrigation controls, if system is provided.
		38.	Verify that surface fixtures do not interfere with full height doors.
		39.	Verify that A/C and plumbing lines do not enter power company transformer vault.
		40.	Verify that panel boards are not on or in fire-rated partitions.
		41.	Provide power for building signs, site signs and other special equipment.
		42.	Verify clearances and access to transformer pads and vaults.
		43.	Verify that no equipment is located in the elevator machine room other than that required specifically for its own operation.
		44.	Verify maximum allowable conduit size permitted in slabs by structural.
		45.	Check required ventilation to be provided in electrical transformer rooms.
		46.	Indicate sound system to comply with Owners specifications.
		47.	Verify whether time clocks are to be 24 hour or 7 day. Verify their control of lights and equipment.
		48.	Verify that site plan and summary of load has been sent to the local electrical company for approval, as applicable.
		49.	Verify data needed for vending machines.