

I N D E X

Access - - - - -	Page 2
Ash lift, Ladder and Ash Cans - - -	Page 17
Base - - - - -	Page 28
Bond - - - - -	Page 7
Building Permit - - - - -	Page 2
Carpentry - - - - -	Page 22
Casings - - - - -	Page 28
Cast Stone - - - - -	Page 14, 38
Celstex - - - - -	Page 43
Changing Details - - - - -	Page 3
Changing Figures - - - - -	Page 4
Checking - - - - -	Page 3
Chimney - - - - -	Page 15
Chute in Furnace Room - - - - -	Page 43
Chute Runners - - - - -	Page 17
Contractors - - - - -	Page 5
Concrete	
Aggregates - - - - -	Page 9
Finish for Outside walls - - - -	Page 12
Floors - - - - -	Page 11
Floor Slabs - - - - -	Page 12
Forms - - - - -	Page 11
Joints - - - - -	Page 12
Mixing - - - - -	Page 10
Placing - - - - -	Page 11
Portland Cement - - - - -	Page 9
Prepositions - - - - -	Page 10
Reinforcement - - - - -	Page 11
Retempering - - - - -	Page 11
Steps - - - - -	Page 12
Water and Consistency - - - - -	Page 10
Corridor Wire Holding - - - - -	Page 27
Damage by Fire - - - - -	Page 7
Deadening Felt & Insulator Paper - -	Page 31
Doors (See Hardware)	
Doors - - - - -	Page 30
Exit - - - - -	Page 31
Exterior - - - - -	Page 30
Frames	
Exterior - - - - -	Page 25
Inside - - - - -	Page 29
Setting - - - - -	Page 26
Vault doors - - - - -	Page 18
Vestibule doors - - - - -	Page 26
Doubling and Trussing - - - - -	Page 24
Drawings - - - - -	Page 8
Drawings, specifications, etc. - - -	Page 3
Drying Tray (Blue Print Room) - - -	Page 43

Electrical Wiring and Fixtures- - - - -	Page 39
Elevator	
Automatic Operation- - - - -	Page 22
Cables - - - - -	Page 21
Cable lock - - - - -	Page 22
Car or platform - - - - -	Page 20
Controller - - - - -	Page 20
Counterbalance - - - - -	Page 21
Drum and Sheaves - - - - -	Page 20
Guide Rails- - - - -	Page 20
Limit Stops- - - - -	Page 21
Location of Winding Engine - - - - -	Page 19
Lubricators - - - - -	Page 21
Motor and Electric Current - - - - -	Page 20
Overhead Beams - - - - -	Page 21
Overtravel stops - - - - -	Page 21
Phase Failure & Phase Reversal	
Protection - - - - -	Page 21
platform Safeties- - - - -	Page 22
Safety Brake - - - - -	Page 22
Safety Gates - - - - -	Page 21
Slack Cable Stop - - - - -	Page 22
Speed Governor - - - - -	Page 22
Winding Engine - - - - -	Page 20
Errors or Inconsistencies - - - - -	Page 3
Excavation and Grading- - - - -	Page 8
Extras - - - - -	Page 6
Finally - - - - -	Page 42
Finish	
Base - - - - -	Page 28
Base Screeds - - - - -	Page 32
Casings- - - - -	Page 28
Corridor Wire Molding- - - - -	Page 27
Interior - - - - -	Page 26
Picture Molding- - - - -	Page 27
Store finish - - - - -	Page 27
Floors	
Concrete - - - - -	Page 12
Finished floors- - - - -	Page 32
Repolish on floors- - - - -	Page 37
Toilet Room floors - - - - -	Page 43
Wood	
(a) Floor Joists and ceiling- - - - -	Page 23
(b) Sub-floors- - - - -	Page 24
Footings- - - - -	Page 8
Framing - - - - -	Page 4, 24
General Lathing - - - - -	Page 33
General Work and Finally- - - - -	Page 7
Glazing and Glass Setting - - - - -	Page 37
Grounds - - - - -	Page 25
Gutter and Down Spouts- - - - -	Page 18

INDEX

Hardware

Bar Sash Lifts - - - - -	Page 40, 42
Bulls - - - - -	Page 39
Casement Fixture - - - - -	Page 41
Door checks - - - - -	Page 40
Door Hardware - - - - -	Page 43
General Hardware - - - - -	Page 40
Hardware - - - - -	Page 39
Hardware not mentioned - - - - -	Page 42
Locks - - - - -	Page 40
Sash Locks - - - - -	Page 40
Store Doors - - - - -	Page 41
Transom Lift - - - - -	Page 40
Weights and Sash Cord - - - - -	Page 40
Havameyer Curb Bar - - - - -	Page 17
Heating and Plumbing - - - - -	Page 42

Improper work - - - - -	Page 2
Inspection of Site - - - - -	Page 5
Interior Finish - - - - -	Page 26
Iron Doors - - - - -	Page 16

Kinds of Lumber - - - - -	Page 22
---------------------------	---------

Laws - - - - -	Page 2
Ledger Boards - - - - -	Page 9
Light Iron Work - - - - -	Page 16

Marquise - - - - -	Page 17
--------------------	---------

Masonry

Anchors - - - - -	Page 15
Base and Iron Plates & Bearings - - -	Page 13
Brick Work - - - - -	Page 13
Cast Stone - - - - -	Page 14, 38
Chimney - - - - -	Page 15
Fire Brick Lining - - - - -	Page 15
Light Iron Work - - - - -	Page 16
Mortar - - - - -	Page 13
Structural Iron and Steel - - - - -	Page 15
Material - - - - -	Page 5
Measurements - - - - -	Page 3
Metal Lath, Metal corner & Base screeds	Page 32

Nailing Blocks - - - - -	Page 24
No advantage - - - - -	Page 3

Office, telephone, Drawings and speci- fications on works - - - - -	Page 4
--	--------

Painting - - - - -	Page 35
Painting and Finishing Iron Work - - -	Page 16
Partitions and Furring - - - - -	Page 23
Pent House - - - - -	Page 23
Picture Molding - - - - -	Page 27

I N D E X

Plans - - - - -	Page 4
Plastering- - - - -	Page 33
Plates- - - - -	Page 24
Protection of Material and work - - - -	Page 5
Quality - - - - -	Page 5
Rapelle on Floors - - - - -	Page 37
Responsibility- - - - -	Page 6
Rights Reserved - - - - -	Page 8
Roof sheathing and eaveboards - - - - -	Page 44 25
Rubbish - - - - -	Page 2
Roofing - - - - -	" 44
Sash - - - - -	Page 29
Schedule and Assistance- - - - -	Page 2
Setting frames - - - - -	Page 26
Sheet metal work - - - - -	Page 17
Shop drawings and samples- - - - -	Page 6
Sizes- - - - -	Page 4
Sleeves and supports - - - - -	Page 39
Soil Testing - - - - -	Page 39
Stairways and railings - - - - -	Page 32
Statement- - - - -	Page 3
Steel Sash - - - - -	Page 31
Steel Stairways & Elevator framing - - -	Page 17
Store Finish - - - - -	Page 27
Stucco - - - - -	Page 43
Sub Contractors- - - - -	Page 7
Sub-floors - - - - -	Page 24
Sufficient Drawings- - - - -	Page 3
Supervision and Incompetent Labor- - -	Page 4
Surveys and Datum Grade- - - - -	Page 6
Temporary Heat - - - - -	Page 4, 25
Thresholds - - - - -	Page 29
Toilet Compartment - - - - -	Page 39
Toilet Room Floors - - - - -	Page 43
Vault Doors- - - - -	Page 18
Vestibule Doors- - - - -	Page 26
Water Supply- - - - -	Page 4
Windows (See Hardware)	
Frames	
Exterior- - - - -	Page 29
Frames- - - - -	Page 29
Interior- - - - -	Page 29
Setting frames- - - - -	Page 26
Glazing and Glass Setting - - - -	Page 37
Sash - - - - -	Page 29
Steel Sash- - - - -	Page 31
Wood brick- - - - -	Page 24
Work Subdivision - - - - -	Page 1
Wire Partitions - - - - -	Page 44

SPECIFICATIONS.

Of labor and material required for the construction and completion of an Office Building, to be erected on the corner of Pilot Butte and "N" Streets, Rock Springs, Wyoming, for The Union Pacific Coal Company. Which building shall be constructed in conformity with the intent of the accompanying drawings, general conditions, and the following specifications, prepared therefore by the Union Pacific Coal Company's Engineering Department, C.E. Swann, Chief Engineer by Jas. L. Libby, E.M. Architect.

The plans consist at this time of 16 sheets.

Note: The person or persons undertaking the execution of the work, or parts of the work under these specifications are hereinafter designated as the Contractor, and The Union Pacific Coal Company employing the Contractor is hereinafter designated as the Owner. The Owner's Engineering Department's representative is hereafter designated ^{as} the Engineer.

GENERAL CONDITIONS

These conditions are to apply with equal force to all branches of the work whether the works are under one entire or under several separate contracts.

WORK SUBDIVISION

The work shall consist of the following:

- (1) General Contract.
 - (a) Excavation
 - (b) Concrete work
 - (c) Carpenter Work
 - (d) Mason work (Brick and Cast Stone)
 - (e) Steel work
 - (f) Sheet metal and ornamental work
 - (g) Roofing
 - (h) Plastering
 - (i) Painting

(1) All other work not covered by heating, plumbing and electrical work.

(2) Heating

(3) Plumbing

(4) Electrical work

(a) All electrical work to be done by the Owner.

ACCESS

The contractor shall furnish suitable and safe means of access for Superintendent or Engineer to all parts of the work.

IMPROPER WORK

Any work not in conformity with drawing and specifications must be removed and replaced both labor and material by contractor at contractor's expense.

LAWS

All work to be done in accordance with local laws and ordinances and such are made a part of these specifications, this to apply also for rules and regulations of the water and electrical light companies.

BUILDING PERMIT

The Owner shall furnish the General Contractor with the necessary building permit.

RUBBISH

The Engineer shall have the power to order the removal of rubbish that may accumulate from time to time if he considers its removal necessary.

SCHEDULE AND ASSISTANCE

The Contractor shall render all necessary assistance to the engineer if required, to take and furnish necessary levels, measurements, etc., on the work or grounds as the case may be. He shall also furnish the engineer if required with a correct schedule of unit prices of all quantities and prices of material under this contract, and no certificate shall be issued unless the contractor files such schedules (if required) by the engineer.

STATEMENT

Statements showing in detail the amount of work and material furnished by the contractor for the proper period must be submitted when application for certificates are made. The engineer will issue certificates for all payments on the work and no payments shall be made until certificates for same have been issued.

CHECKING

The general contractor shall verify all lines, levels, dimensions, etc., shown on survey or on the drawings and will be responsible for the correctness of the work. He will follow dimensions rather than the scale distances.

DRAWINGS, SPECIFICATIONS, ETC.

Drawings and specifications are intended to supplement, not duplicate each other, so that anything that is shown by drawing or specification is to be done as if shown by both.

MEASUREMENTS

The contractor shall follow sizes in specifications or figures on drawings in preference to scale measurements and follow the details for what they show in preference to general drawings.

ERRORS OR INCONSISTENCIES

which appear or occur shall be brought to the attention of the engineer by the contractor before the latter proceeds with the work. In no case shall the contractor proceed with uncertainty.

NO ADVANTAGE

shall be taken of any manifest omission or discrepancy.

SUFFICIENT DRAWINGS

and data for the work are to be furnished and in no case shall the contractor proceed with any work without them. In case he is not supplied he shall apply for such drawings and explanations as may be necessary.

CHANGING DETAILS

If any detail drawing shows more expensive work than that indicated on

the drawing or specifications on which bids were made, the contractor must give the engineer notice to correct them. If the contractor does not notify the engineer he hereby agrees to carry out the work as detailed without extra charge.

CHANGING FIGURES

The contractor must not change figures or otherwise alter drawings but must report all errors or discrepancies that he may discover to the engineer for correction before doing any work in which these errors are involved.

OFFICE, TELEPHONE, DRAWINGS AND SPECIFICATIONS ON WORKS

The general contractor shall have telephone service in an office near the works, and shall keep a complete set of drawings and specifications in his office at the works.

PLANS

Where special framing is shown on plans it is to be followed in preference to general specifications.

SIZES

Sizes and dimensions are in the main shown, but where they are not shown in they are the same as those in other places for similar purposes or usual size.

FRAMING

All framing to be done in the usual manner and well nailed.

WATER SUPPLY

The contractor must provide for his water supply.

TEMPORARY HEAT.

The General contractor shall furnish all coal and provide for all temporary heat in connection with the construction and finishing of said building.

SUPERVISION AND INCOMPETENT LABOR

The general contractor shall at all times during the progress of the work be present, or be represented by a competent foreman with full authority and direction to carry out any instructions that may be given by the engineer or superintendent. Any workman who may be incompetent or otherwise objectionable

shall be removed from the works upon request. Such instructions to be acted upon immediately.

PROTECTION OF MATERIAL AND WORK

The contractor shall be responsible for all material furnished by the Owner and use due care in its use; properly protect his own and all other material and work during the erection and completion of the work. Good practice to govern in its use, and all waste to be avoided either due to careless work or improper use. The contractor shall replace at his own expense all materials so damaged or improperly used.

CONTRACTORS

The different contractors shall arrange their work so as to be advantageous to all, and shall promptly execute the same so as to avoid delay and expense. General contractor to be setting of joints and putting in headers, etc., that is carpenters work and make and leave provision for plumbing and heating.

MATERIAL

Various contractors are to provide all material and labor, and appliances necessary for the proper execution of the various portions of the work including light, heat and power, unless specifically stated otherwise.

QUALITY

All material and workmanship to be a good grade of the respective kinds throughout the building; any defective work or material not being rejected at the time the material may be delivered ~~on hand~~, or used, or inferior work has been executed, it shall not be assumed by the contractor that the work or material is satisfactory. The contractor shall make good any work or material at any time before the acceptance of the building. The decision of the Engineer as to the interpretation and intent of the drawings and specifications shall be final and binding on all parties concerned.

INSPECTION OF SITE

All parties contemplating the undertaking of the proposed work shall

visit the site and ascertain the condition thereon and should they fail to do so it shall in no way relieve them of the responsibility they may assume later.

SHOP DRAWINGS AND SAMPLES

Shop drawings, setting, plans, as may be required or hereinafter specified must be furnished to and approved by the Engineer before any part pertaining to such drawings is executed. The approval of such drawings shall be only in general and does not mean that such drawings have been checked and shall in no way relieve the contractor from the responsibility, or the proper fitting and construction of the work in strict accordance with the contract requirements, nor from the necessity of furnishing material or workmanship required by the drawings and specifications, which may not be indicated on such shop drawings when approved.

All shop drawings and samples must be approved before ordering or starting the work pertaining to that part which may require samples or shop drawings.

The approval of samples is only general for mechanical working, quality or finish as the case may be and does not modify the requirements of the drawings and specifications as to dimensions and design.

EXTRAS

No extras shall be allowed, unless ordered by the Engineer in writing.

SURVEYS AND DATUM GRADE

The Owner shall have the site surveyed, locating the property lines, and general corners for the building as indicated on the drawings, and furnish the contractor with a datum grade where necessary.

The Contractor to check and preserve these stakes and grades ^{and} set such additional stakes and grades as may be necessary.

RESPONSIBILITY

The Contractor shall comply with the Compensation law and all other laws and ordinances and shall be held responsible and not the Owner or Engineer who will not be in any way answerable for any and all loss or damage that may happen to the

work, or any part thereof, or of any materials or tools used and employed in finishing the work.

DAMAGE BY FIRE

The Owner shall during the progress of the work maintain insurance on the said work in his name against loss or damage by fire. The policy to cover all work incorporated in the building and the materials for the same in or about the premises, and shall be payable to the Owner. The Owner to pay the Contractor from this insurance his proportion on his interest as may appear.

SUB CONTRACTORS

The Contractor when the work is started shall furnish the Engineer with a list of his sub contractors and if satisfactory to the Owner and Engineer they shall be employed on this work. The contractor being responsible for any and all work.

BOND

The Contractor to furnish a _____ bond satisfactory to the Owner to the amount of Fifty (50%) per cent of the amount of the contract to protect the Owner against failure of the Contractor to fully perform the covenants of the contract.

GENERAL WORK AND FINALLY

The Contractor is to figure on a neat and complete job ready for occupancy and to the satisfaction of the Engineer in charge. Small details not usually specified and any omissions necessary to complete the job according to the general intent of the plans and specifications are to be figured in on the bids and are to be executed as if specified. Usual good practice to govern.

The Contractor is to repair and make good any and all damage, no matter how or by whom caused (loss by fire excepted), remove all debris and rubbish leaving the premises clean, all glazing clean and free from paint and everything in perfect order and repair ^{at} the termination of his work.

RIGHTS RESERVED

The material proposed to be used, time for completion, competency and riskability of bidders will receive consideration before award of contract. The Owner reserves the right to accept any part or parts of the proposal made at price included in same, also waive any formalities in or reject any and all proposals.

DRAWINGS

The plans consist of 16 sheets of scale drawings, Nos. 2000.3100 A Sheets 1 to 16.

Heating Plans Sheet 15. Plumbing Sheet 16.

Also additional sheets and sketches as may be prepared from time to time to detail or illustrate the work.

EXCAVATION AND GRADING

The contractor shall do all necessary grading and excavation necessary to conform with the plans and specifications. He shall take care of all waste material. A small amount to be spread around the building to fill low places.

After all cement work is completed the Contractor shall fill in, and tamp so as to compact all holes and excavation around the outside of the building, leaving the work in a neat and graded condition.

Grades in all cases to be made to take care of the drainage, so the water will run off.

All excavation under concrete floors shall be excavated to a depth of 12 inches below the bottom of the concrete and back filled with cinders, wet rolled and tamped to give a good base for the concrete.

FOOTINGS.

All footings to be of ample size to give proper bearing for the soil. All soil of uncertain nature shall when necessary be tested for bearing, and footings increased to conform; or footing carried down to good bearing as deemed best by the Engineer.

LEDGER BOARDS

The contractor shall erect good solid ledger boards at all corners of the proper height and with the building, water table, excavation line etc., all located on them. These to be made permanent set with Engineer's level and all corners turned with Engineer's Transit. Lines and grades available at all times to check elevations and distances.

CONCRETE.

"A" PORTLAND CEMENT

Portland cement shall be an approved brand meeting the requirements of current Standard Specifications for Portland cement adopted by the American Society for Testing materials.

"B" AGGREGATES

(1) Coarse Aggregate (or gravel)

Coarse aggregate shall consist of clean, hard, tough, crushed rock or pebbles graded in size free from vegetable or other organic matter. The size of the coarse aggregate shall range from $1\frac{1}{2}$ inches down, not more than 5 percent passing a screen having 4 meshes per linear inch and no intermediate sizes shall be removed.

(2) Fine aggregate (or sand)

The fine aggregate shall consist of sharp natural sand, hard material, clean and free from any surface film or coating and graded from fine to coarse, with the coarse particles predominating.

Fine aggregate, when dry, shall pass a screen having 4 meshes to the linear inch, not more than 25% shall pass a sieve having more than 50 meshes per linear inch and not more than ^{5%} ~~25%~~ shall pass a sieve having 100 meshes per linear inch.

Fine aggregate shall not contain injurious vegetable or other organic matter as determined by the colorimetric test, nor more than ^{by} 5% volume of clay or loam.

"C" WATER AND CONSISTENCY

The water shall be clean, free from oil, acid, alkali or vegetable matter.

Only sufficient water shall be used to produce a workable plastic mix which will flow sluggishly into the forms and around the reinforcement and which can be conveyed from the mixer to the forms without the separation of the coarse aggregate from the mortar and give a slump test of not more than 3 inches.

In cases where the reinforcement is complicated or ⁱⁿ thin walls a greater workability may be necessary which may be accomplished by adding equal parts of cement and water, which will keep the water cement ratio a constant.

The minimum amount of water to be used in all cases to give a workable mass.

"D" PROPORTIONS

The concrete shall be mixed in the following proportions.

1 sack Portland cement, $1\frac{1}{2}$ cu.-ft. fine aggregate and 3 cu.-ft. coarse aggregate, giving a 1 to 4 true mix of graded material of best fineness modulus. Not less than 6.3 sacks cement per cu.-yd. of concrete. Used for all slabs, beams, columns, reinforced work, floors and steps.

1 - 2 - $3\frac{1}{2}$ field mix giving a 1 to 5 true mix of graded material of best fineness modulus. Not less than 5.2 sacks of cement per cu.-yd. of concrete. Used for mass concrete and walls.

Topping or wearing surface for floors and steps shall be 1 cement to 2 fine aggregate of the driest consistency possible to work with a sawing motion of the strike board.

"E" MIXING

All concrete shall be thoroughly mixed in an approved batch mixer, with a speed of approximately 20 r.p.m. Mixing shall continue at least one minute after all materials are in the drum. Raw materials shall not be permitted to enter drum until all material of preceding batch has been discharged.

"F" RETEMPERING

Retempering of mortar or concrete which has partially hardened, that is mixing with or without additional water shall not be permitted.

"G" REINFORCEMENT

Reinforcing metal shall be provided as called for in the plans. All bars shall be deformed. It shall be placed as indicated and mechanically held in position so that it will not become disarranged. Any and all splices shall be made so as not to weaken the concrete.

The mesh reinforcement for the floor slabs shall be held up at supports by means of small precast concrete blocks which are to be left in place. All reinforcing metal shall be standard grade free from rust, scale, paint, etc., which will tend to reduce or destroy the bond.

The wire mesh reinforcement on the end spans shall be properly fastened. Dowel pins or anchors shall be left in side walls where ever necessary.

The reinforcing schedule as shown on sheet 9, 11, 12, 13 and 14 to be followed together with other instructions. All footings to be tied to walls and piers by vertical reinforcement or dowel bars.

The wire mesh reinforcement shall have a side lap of at least 2 inches.

FORMS

The forms shall be substantial, unyielding and so constructed that the concrete will conform to the designated dimensions and contours. Shall be made tight out of 8" Pine shiplap to prevent leakage of mortar. The supports for all floors and beams shall not be removed until the concrete has hardened sufficiently and then only on consent of the Engineer in charge. The Engineer shall also direct when the forms on walls, etc. shall be removed. All work shall show a true and even surface when forms are removed.

PLACING

The concrete shall be placed to give a smooth surface and thoroughly worked around the reinforcement, deposited in uniform, horizontal layers well

tamped and spaded. The dumping chutes to be moved uniformly around the walls. Proper care shall be taken to bring up walls level, and roughing surface to give a good bond for next days run. The surface for next days run to be cleaned and wet up and greated if necessary to secure a good bond.

JOINTS

Where it is necessary to make a joint in the floor slab or beam its location shall be designated by the Engineer; joints to be vertical.

FINISH FOR OUTSIDE WALLS

All outside walls shall be plastered and floated to a coarse sand finish.

FLOOR SLABS, FLOORS AND STEPS

After mixing the concrete shall be handled rapidly and the successive batches deposited in continuous operation completing individual sections of the required depth and width. Under no circumstances shall concrete that has partially hardened be used. The forms shall be filled and the concrete struck off and tamped to a surface the thickness of the wearing course below the established elevation of the floor. The method of placing the various sections shall be such as to produce a straight, clean cut joint between them so as to make each section an independent unit. If dirt, sand or dust collects on the base it shall be removed before the wearing course is applied.

Workman shall not be permitted to walk on the freshly laid concrete. Any concrete in excess of that needed to complete a section at the topping of the work shall not be used. In no case shall concrete be placed on a frozen sub-grade or sub-base.

All slabs, floors and steps shall have proper reinforcement carefully and accurately placed. Reinforcement shall not be disturbed after the concrete has started to set.

The wearing course shall be properly mixed and the minimum thickness shall be $\frac{3}{4}$ of an inch. The mortar shall be of the driest consistency possible to work and placed immediately after mixing. It shall be deposited on the fresh

concrete of the base before the latter has appreciably hardened and brought to the established grade with a strike board. In no case shall more than 45 minutes elapse between the time of the concrete for the base is mixed and the wearing surface placed. After the wearing course has been brought to the established grade by means of the strike board, it shall be worked with a wood float in a manner which will thoroughly compact it and provides surface free from depressions or irregularities of any kind. The surface shall then be troweled smooth with a steel trowel, no trowel marks to show, excessive working to be avoided.

In no case shall dry cement or a mixture of dry cement and sand be sprinkled on the surface of the wearing course to absorb moisture or hasten hardening. Special methods not conflicting with these specifications may be used subject to approval by the Engineer. The reinforcement shall be slightly pressed into the concrete base during the laying.

MASONRY

MORTAR

All brick shall be laid in cement mortar composed of Garney cement machine mixed according to the manufacturers standard. This to apply also in general for laying the cast stone. No brick or masonry work shall be laid during freezing weather. All face brick shall be laid in mortar colored same shade as brick, approved mineral color to be used.

BASE AND IRON PLATES AND BEARINGS

All base plates and bearings in general shall be imbedded in a 1 to 2 cement mortar and must have a full bearing and proper thickness. The heavy plates for the beams will have to be set on concrete slabs formed in the piers and face brick laid around the concrete. All to have a full bearing.

BRICK WORK

All common brick shall be uniform in size, hard burned, firm in texture and free from checks, laminations, pebbles or other defects.

The face brick for the front on Pilot Butte and "N" Streets and return on two pilasters at the ends shall be Nutex Rug Face brick of Golden Buff

Medium shade Salt Lake Pressed Brick Company Mfg or similar laid in colored mortar.

The face brick on the north elevation and the southwest elevation shall be selected common brick of the same shade or color. This to apply also to the chimney where it sticks above the roof, all laid in colored mortar.

The back of the common bricks to be for the back walls with natural colored mortar.

All brick shall be laid with approximate $1/2$ " joint to give $2\ 3/4$ " per course. A full sheared joint is to be used and the brick kept clean. All brick to be bonded every fifth (5th) course with full headers. All backing to be laid with a shoveled joint. All brick piers, pilasters and around openings supporting beams, etc. to be grouted every fourth (4th) course.

All brick to be thoroughly wet before laying and no brick laid in freezing weather.

Build in all slots, chases, etc. as required for pipes etc. to be provided as hereinafter specified. Build in necessary chimneys, clean out doors, anchors, etc.

All walls must be built uniformly; one scaffold high at a time to be plumb true and to the line and have horizontal joints level. Each side of the wall, that is the inside and the outside, to be laid to a line.

The wall between the Purchasing Agent and the Store to be a 12 inch brick wall laid after the store floor is run.

The $8\frac{1}{2}$ " walls on the upper floor are to be corbeled out 4 inches to give a bearing for the joists. Corbeling to start 5 courses below the joist. All to be well tied with headers.

CAST STONE

Masonry shall also include Cast Stone setting which shall be set with a $1/4$ " tight joint and neatly pointed. All to be laid to a line with proper bedding, all well anchored to the brick work. Carefully handled to avoid chipping off pieces.

The chimney to be well laid and plumb, well bonded, the brick laid on the inside to have full corners and to be laid so as when pointed up it will give a smooth surface, not to be plastered inside.

FIRE BRICK LINING

From the shell six feet above the basement floor the concrete part of the chimney will be lined with fire brick well bonded and a tight joint. Fire clay mortar to be used.

The chimney shall be provided with a suitable approved clean out door.

STRUCTURAL IRON AND STEEL

Provide and install all structural iron work of every description consisting of concrete reinforcing, beams, columns, plates, straps, bolts, separators, anchors, etc., necessary to make the job complete.

All steel work to be according to the American Bridge Company's Standards and requirements. Good practice to govern.

The setting of all steel and iron work must be accurate and substantially set in place as the work progresses. The contractor will not be allowed to proceed with the masonry leaving openings into which to install steel later.

All beams to be shored up where necessary in the construction.

The general contractor shall bore such holes with portable drill as may be required for anchoring window and door frames, cast stone, etc.

ANCHORS

All anchors to have proper size cast washer, or cut washer of proper thickness and equal area to give sufficient bearing for masonry and wood.

All anchors in connection with masonry shall be built in as the work progresses.

Joist anchors shall extend on joist at least 12 inches being secured near the bottom with at least three spikes and spaced 4 feet centers. Joist anchors to be the strap pin type. But will have to be modified slightly to

anchor to the steel beams in places.

(16)

Anchor for all plates shall be $1/2"$ x 24" and spaced 4 feet on centers.

All necessary anchors for cast studs shall be included and shall be of ample thickness.

Provide and install four anchor bolts for each abutting partition adjacent to masonry and concrete; size $1/2"$ x 12", large washers to be used.

Provide and install chair inserts for the 2 x 2 joints over the furnace room. These to be leveled up and lined, set three feet centers along the 2 x 2's.

LIGHT IRON WORK

Provide and install all necessary hangers, bolts, etc., required to make the work secure.

PAINTING AND FINISHING IRON WORK

All steel and iron work of every description (except concrete reinforcing) before leaving the shop shall be cleaned of rust, scale, etc., and treated in the following manner.

All anchor bolts in connection with masonry shall be galvanized or heavily coated with asphalt.

All structural steel before leaving the shop shall be given one coat of paint (25¢ of red lead to one gal. of linseed oil) well worked into all joints and open spaces.

Where members come in contact each surface to receive a coat of paint before being riveted together.

All steel work shall be painted one field coat of heavy graphite paint before erection. All paint to be properly applied with a brush, kept well mixed and surfaces to be clean and dry before applying.

Coal hole sidewalk doors to be treated the same as steel work.

IRON DOORS

The doors to the coal bin, area way in furnace room and chute to the store basement to be strong standard doors with frame. All to be properly

anchored and placed in the concrete. Fixed to lock on the inside, with suitable handles for opening.

ASH LIFT, LADDER AND ASH CASE

The ash lift to be Gillis and Geoghagan or similar. Telescopic Hoist, hand power with automatic gear shifting device as shown in Sweet's Catalogue, together with 4 (17 x 24) Hoisting cans with swing ball well made. Also to have light iron ladder, vertical about 4' from the wall, all well anchored and secure.

CHUTE RUNNERS

The chute into the basement to have six flat iron bars 1 1/2" x 2" anchored to the concrete with counter sunk bolts. The lower end to have a removable chute. This chute to have iron slide plates on top to be adjustable at lower end, the top end to have a hinged section; to be made out of oak and not too heavy.

HAVENMEYER CURB BAR

All nosing on concrete steps to have Havenmeyer Round Curb bar.

Both sides of elevator pit and elevator hatch to have Havenmeyer Angle Curb bar.

STEEL STAIRWAYS AND ELEVATOR FRAMING

All to be according to the plans, well made. The non slip treads on the stairways are to be placed so, that the long leg of the diamond is the length of the tread and not the width so as to give a better grip.

SHEET METAL WORK

The sky light and ventilators to be well made and braced so as to be stiff. All to be made out of 22 Ga. Galv. iron with drip troughs. The sky light fixed up for ribbed wire glass. The ventilators to be 10 inches in diameter and as shown on Sheet #3.

The sheet metal work for the Marquise shall be made out of 26 Ga. Galv. iron bent to give a neat molding effect of an approved design. To have a light trough with sockets spaced about 11 1/2 inch centers.

The valance to be pressed zinc and to be approximately 5" deep.

The glass to be white opal.

The metal to run back under the Bayonne Deck Cloth #1299 (laid according to Mfg instructions) that will be used for the roofing. This roof to have two coats of lead and oil paint of approved colors. Gargoyles to be placed 5 feet on centers to take care of the water and to stick out 8 inches.

All to be water tight and must present a neat appearance when completed.

The two pieces of timber shown at ends are 2 x 10 and the pitch is 2 inches.

Pressed Zinc Dressing ornaments as shown and Lion Head Ornaments for the anchors.

GUTTER AND DOWN SPOUTS

The gutter to be a 4 inch bottom 6 inch top Ogee shape, properly anchored to the roof and flashed. All to be graded and rigid construction, to have a 1/2" gravel guard and to be made out of 26 Ga. Galv. iron. The down spouts to be 2 1/4 x 4 1/4 square corrugated expanding made out of 26 Ga. Galv. iron. All to be complete with elbows, shoes, anchors, hangers, etc., necessary. The shoe to be about 8 inches above the ground. The grade to be taken care of in making the gutter.

VAULT DOORS

Fire proof vault fronts (single outside door).

Herring-Hall Marvin Safe Company, Hamilton, Ohio, or equally as good of approved manufacture.

5 Fronts #21.

Dimensions-Outside 80 1/2 ins. high, 33 1/2 ins. wide and 20 ins. deep. Wall opening required, 81 1/2 ins. high, 34 1/2 ins. wide. Clear opening through vestibule, 77 1/2 ins. high, 29 5/8 ins. wide.

1 Front #14 (Double Outside Doors)

Dimensions-Outside 30 ins. high, 43 ins. wide, 20 ins. deep. Wall opening required 31 ins. high, 44 ins. wide. Clear opening through vestibule, $77\frac{1}{2}$ ins. high, $36\frac{1}{2}$ ins. wide.

Specifications - Sides and top No. 16, bottom $1\frac{1}{8}$ in. sheet steel. Front frame formed of $3\frac{1}{8}$ by $3\frac{1}{16}$ in. open hearth steel bars, riveted at the bottom into $2\frac{1}{2}$ by $\frac{1}{2}$ in. sill bars, fastened at the top by bar clips. Securely fastened to this frame are the 1 by $3\frac{1}{8}$ in. filling bars. To the filling bars is securely riveted the $1\frac{1}{2}$ by $1\frac{1}{2}$ by $3\frac{1}{16}$ in. open hearth steel angles. These bars are so placed that between the outside frame and angles, a groove is formed on the right hand side of the vestibule jamb, into which groove the tenon on the rear of the door interlocks when closed.

The rear frame is formed of $1\frac{1}{2}$ by $1\frac{1}{2}$ by $3\frac{1}{16}$ in. open hearth angles, securely fastened to the vestibule. Removable bars 4 by $3\frac{1}{16}$ ins., of open hearth steel, are fastened on the back of the rear angles. These bars may be removed until the vestibule is set into the wall, after which they are to be replaced, thus holding the vestibule securely in position.

Outer door plate formed of $3\frac{1}{16}$ in. open hearth steel, reinforced on sides, top and bottom by 2 by $\frac{1}{2}$ in bars, making doors $7\frac{1}{16}$ in. thick on edge. Doors swing to the right unless otherwise specified.

ELEVATOR

Hollister Whitney Company type elevator, or approved substitution.
from
Capacity to be 2,000 pounds and travel ~~122~~ basement floor to 1st floor 10 feet 1 inch at a 54 foot speed.

LOCATION OF WINDING ENGINE

The Winding Engine will be of the LATEST IMPROVED TRACTION TYPE located in penthouse over hatchway.

Operation will be by means of straight pull tiller ~~type~~ ^{rope} inside of hatchway accessible to the operator from the platform and from either floor.

WINDING ENGINE

The Winding Engine will be of the direct connected single worm gear type fitted with Phosphor bronze worm wheel, machine steel worm integral with shaft, self aligning ball thrust bearings, and spring set electric brake; all mounted on an extra heavy one piece cast iron bed plate.

The Worm and Gear will be accurately machined, fully enclosed and operate in oil.

MOTOR and ELECTRIC CURRENT

The Electric Motor will be of ample capacity for the duty required, manufactured especially for elevator service and guaranteed to comply with the standards of the American Institute of Electrical Engineers. It will be wound for 220 Volt, 3 phase, 60 cycle alternating current, and will not operate on any other.

CONTROLLER

The electric controller will be of the semi-magnet type and arranged to give the operator full control of the car at all times; all lines are disconnected in the "off" position, thus preventing the use of current when the Elevator is at rest.

CAR OR PLATFORM

The platform will be approximately 7'0" postwise x 7'0" back to front.

The height of platform under beam will be 7'0"

The car will be of side post pattern, all steel construction with hard wood platform covered with a two ply hard wood floor; entrance edge of platform to be metal clad.

XXXXXXXXXXXXGUIDE RAILS

The car and counterbalance guide rails will be of wood, compound built.

Car guides will be faced with rock maple.

DRUM AND SHEAVES

The drum and sheaves will be of cast iron of ample weight with machine

scored grooves and mounted on heavy steel shafting supported by suitable bearings.

Drip pan will be provided for installation under the overhead sheave.

COUNTERBALANCE

The counterbalance will be adjusted to the average load conditions, thus insuring maximum economy in operation.

CABLES

The cables will be of Sweden iron of ample size and number for the duty required.

LUBRICATORS

Approved pattern capillary oilers will be provided for the guide rails.

SAFETY GATES

The contractor shall equip the elevator hatch with wood guard gates which will operate from arms on the elevator and allow about 7'0" clearance when elevator is at floor level.

OVERHEAD BEAMS

The beams supporting the overhead machinery will ^{be} of steel, furnished and covered with a suitable floor by the contractor.

AUTOMATIC SAFETY DEVICES

LIMIT STOPS

The operating control cable will be furnished with limit stops which will shut off the power, set the brake and bring the platform to an easy stop at the top and bottom landing.

OVERTRAVEL STOPS

The elevator will be fitted with approved pattern overtravel switches which will disconnect the power, set the brake and stop the winding engine should the platform overtravel its normal limits.

PHASE FAILURE AND PHASE REVERSAL PROTECTION

The elevator will be equipped with an approved type phase failure and phase reversal protective device.

SLACK CABLE STOP

The elevator will be provided with an approved pattern slack cable stop which will disconnect the power and stop the winding engine should the platform meet an obstruction in descending.

SAFETY BRAKE

The safety brake will be applied by all of the automatic safety devices, and bring the elevator to an easy stop.

PLATFORM SAFETIES

The platform will be fitted with positive acting "safety grips" attached to the bottom of the car, and arranged with the guide strips and stop the car should the lifting cables break.

SPEED GOVERNOR

The safety speed governor will operate in connection with the "safety grips" and stop the car should it attain an unsafe speed in descending.

AUTOMATIC OPERATION

All of the above safety appliances are automatic in operation and entirely independent of the operator.

CABLE LOCK

The platform will be fitted with an approved pattern safety cable lock to prevent operation of the elevator while loading or unloading.

CARPENTRY

The building contractor shall do all necessary wood work, cutting, casing, boxing, boring, etc., for pipes of all kinds (except electrical work) including plumbing and heating.

KINDS OF LUMBER

All framing lumber to be Douglas Fir, free from sap, large or loose knots, shakes or other imperfections impairing the strength or durability. Lumber is to be well seasoned, ~~as the market affords~~. The floor joists, stair stringers shall be #1 Dimension Kiln Dried at the mill and must be stored and properly cared for till used.

FLOOR JOISTS AND CEILING

All floor and ceiling joists in general shall be 2 x 12 rough S&E only spaced 16" on centers. In general on the spans 18 feet or over every other joist shall be doubled. All joists to have crowning edge framed upward and full bearing. Double all joists under partitions running parallel to same. Double all headers and ~~trimmers~~ ^{trimmers}. All headers over 5'0" long to be supported with approved hangers. Additional headers or trimmers to be put in where the Engineer shall deem it necessary.

The floor and ceiling joists where built into masonry are to have the ends cut with a three in.splay and to have at least a 4 inch bearing; the floor joists shall be sized to an equal depth so that the top edges will line up. All spans to have one row of 2 x 4 barring bene bridging, and the 18 foot span to have two rows.

PENT HOUSE

The framing for the pent house shall be 2 x 4 studs, (with single bottom and double top plates) 16" centers. 2 x 6 rafters and ceiling joists.

PARTITIONS AND FURRING

2 x 4 studs with three plates for basement toilet rooms and walls under back stairs.

2 x 4 studs with three plates for all inside partitions except as noted on the upper floors.

Partitions both sides entrance bay 2 x 6.

Rear toilet room partition	1st floor 2 x 6
Dark and Blue Print room	2nd floor

All partitions to be plumb, secure and square, all anchored to masonry walls and structural steel where possible.

All columns, beams, etc., to be neatly furred so as to give a square projection into the rooms on the walls or ceiling. All beams, columns, etc., to be made to conform as much as possible in each room, that is all to be same size so as to give uniform appearance.

FRAMING

All framing to be properly nailed, and everything left secure, providing all necessary hangers, bolts, anchors, etc., as shown required or specified.

DOUBLING AND TRUSSING

Double all studs and headers, and truss over all openings in wood partitions. Short pieces not allowed for doubling. Put in all extra pieces necessary for nailing finish and trim.

PLATES

All walls to have wide plates of 2" material where the joists rest. Also to be a plate for the back brick wall where the roof framing comes.

All these plates to have a full bearing and plates to be level. All secured with anchor bolts 4 feet on centers.

WOOD BRICK

No wood brick will be permitted.

NAILING BLOCKS

The contractor shall clean out the brick joints while green and later drive in oak plugs for nailing blocks for the grounds.

For the concrete walls the contractor shall put in beveled pine inserts, which will have nails in them to give a good hold to the wall for nailing blocks for grounds.

Suitable inserts to be put in around doors and windows where necessary to hold the jambs.

SUB-FLOORS

Lay sub-floors diagonally over all wood joists. All sub-floors to be 1 x 8 common pine boards with all loose knots, knot holes and other imperfections cut out; breaking joints on bearings and securely nailed to each bearing, short pieces not permitted with exception of one per run; not less than 2 - 10d nails (cement coated), at each bearing; leave out a board every ten (10) feet the entire

run securing the loose board in place after the roof is entirely completed.

ROOF SHEATHING AND CELOTEX

Cover the entire roof with 1 x 8 pine shiplap, breaking joints on bearings, and not more than two consecutive joints to a bearing, nailed at each bearing with 2 - 10d cement coated nails. Short lengths not permitted except one per run. The entire roof including the vault to have a layer of celotex applied to the roof boards or the concrete for insulation.

The celotex to be applied to cement roof well mopped with floating while wet.

GROUND

Provide and secure in place suitable 3/4" grounds where ever necessary to regulate thickness of plaster or for fastening trim. All grounds to be set to a straight edge, to be straight and true.

TEMPORARY CLOSING

The contractor shall temporarily close the building when ready for plastering. All windows to be covered with temporary sash or muslin, and no permanent sash shall be installed until the plastering is completed and thoroughly dry.

TEMPORARY HEAT

Should the building require heat for its completion or for the plastering, the contractor shall pay for temporary connections of radiators and maintain the heat at his own expense.

EXTERIOR DOOR FRAMES

Entrance frames to be made as shown on details. Jambs, sash and outside trim to be California White Pine. All jambs to be as heavy as possible to be well anchored top, bottom and every three feet in intermediate height. All to be rabbeted.

~~Shall be made of the same material as the inside trim and shall be shown~~

The jambs and outside trim for doors to the Southern Wyoming Basement

Room, Rear entrance, Rear entrance to the store and exit doors all to be made out of 1 3/4 x 8" White Pine with brick molding same as windows. To have a rough buck. All to be rabbeted. Inside trim to conform with inside doors.

VESTIBULE DOORS

Vestibule doors to be same as outside doors with transom above same as outside entrance. Middle transom sash fixed and two over side lights hinged, square head same height as entrance. Glazed B&B Libbey Glass.

EXTERIOR WINDOW FRAMES

All as per details well made out of California White Pine. All to be as approved shop drawings, details shown on Sheet 3.

To have a reglet 1/16" thick. Made for double hung and fixed windows, and hinged transom and lever sash. All to be well made and side windows to have weights.

SETTING FRAMES

All frames must be set plumb, true and secured ⁱⁿ that position, and see that the stays are not removed by workmen before frames are entirely bricked in. Before setting the frames, cut in sufficient shore to keep sides from springing. The shore to remain in place till the rails are completed. All jambs and built up members to be properly blocked and nailed. Rough bucks used as shown, all work to be weather proof as far as possible. All frames to be anchored at the top and bottom and three equal distances intermediate in their height. Extra long frames to have proportionally more anchors.

INTERIOR FINISH

All interior wood moldings and trim to be of selected slash grain fir unless otherwise specified or indicated on the drawings. Of kind, size, etc., as shown or indicated on drawings for the specific or similar case where it applies.

All basement rooms, store basement to be SG Fir selected.

All offices, halls, stairhalls, stairways, toilet rooms on the first and second floors with the exception of the Engineers Blue Print and Supply rooms

and dark room to be figured as Plain Sawn White Oak. And amount to deduct if finished with Selected SG Fir to be shown on the bid.

STORE FINISH

The Interior finish for the store in general will be California White Pine to match the backs of the display windows. Rail on top of the concrete railing for the stairway to be White Oak. The hand rail to be oak also the resettes.

The back stairway trim and exposed store side trim also balusters all to be White Pine this to include counter tops.

The Main floor side and the Store Managers Office to be selected slash grain fir. The back receiving room on the Main floor to be Slash grain fir.

The doors in all cases to conform. The store doors to the back room to be fir. The outside doors at back, pine.

The hand rail for stairways and railings in all cases to be White Oak, also the resettes.

CORRIDOR WIRE MOLDING

In all cases to match the trim for material.

On the second floor 15 feet along the Drafting room side of the 5'6" entrance hall, then on Main Hall side to the concrete wall, then along the side and the end and back on the other side to the stairway, is to have wire molding. The ends to be returned where necessary.

On the first floor, the continuous wall on both sides and ends of the hall with a break at the wall over the door to the Purchasing Agent, the stair hall and the entrance to the Southern Wyoming Electric office, also along the wall on side next to the hall of the Clerks alcove at the entrance to the Southern Wyoming Electric.

PICTURE MOLDING

In all cases to conform with the other trim for material.

The picture molding to be as follows:

(a) Around the rooms on the three inside walls stopping at the outside pilasters for

Basement	Compensation Department
1st Floor	Purchasing Agent
	Southern Wyoming Electric
	President
	Clerk
2nd Floor	All offices and Library

(b) All around with a break at the window ends returned.

1st Floor	Vice President
	General Office Stenographers
	General Superintendent
Store Mezzanine Floor	Clarks Office and General Store Manager

2nd Floor	Auditing Department
	Drafting room, except where there is wire molding
	Clerk on the landing

BASE

All rooms, halls, corridors, etc., except those with concrete floors to have a wood base as shown of material to conform with the trim schedule, using a White Oak tee strip $1\frac{1}{2} \times \frac{3}{4}$ #8422 if oak finish and maple for fir finish rooms.

All rooms, halls, etc., where concrete floors also concrete stairways to have a Burger base screed set along walls to give a 6 inch Portland cement base. The stairways and railings also to have similar base.

No base to be used in Furnace room, Coal room, inside the vault or the basement receiving room. The stock room to have no base on all concrete walls, but is to have the base on the wood partition walls, metal lath to be used on the wood studs.

CASINGS

Casings for inside doors to be #8308 with back band #8378 with stop #8091 ($1\frac{1}{2} \times 1\frac{7}{8}$). All to conform in material with trim schedule.

Casing for windows in $8\frac{1}{2}$ " brick wall to be similar to that for doors, all shown on sheet #3. Apron is not to be backed out as shown.

Casing for windows in 13" brick wall to be as shown on Page #3.

INSIDE DOOR FRAMES

All interior door frames to be 1 1/8" thick of material to match trim. Where fir is used it is to be straight grain.

To have stop #3091 (1/2 x 1 1/8) bradded to the jamb to form rabbet for doors.

WINDOW FRAMES

All wood window frames to be made as per detail sheet #3, out of California White Pine with weigh boxes for windows at sides. All to be tight and well made.

INTERIOR WINDOW FRAMES

All glass windows in interior partitions to be similar to door frames and made to member and conform. Top to be same height as transom to give a continuous head. The transom bar to be continuous and to give continuous line. Sill to be 2"6" off floor and trimmed same as sides and head. Glass to be in a 1 3/4" frame 2" wide, single light below and the top to conform to the door transom. All to be put in with wood stop #3091 or similar of less width. All of approved shop drawings.

The window in toilet room to be a fixed sash and back band trim all around.

THRESHOLDS

There will be no threshold under the interior doors. Provide and install a neat metal threshold under all exterior doors, also vestibule.

SASH

All sash for the double hung windows to be the best grade of standard stock.

The fixed sash, transom and hinged sash to be 1 3/4" California White Pine. All well made and doweled and with suitable members on frame so that the hinged transom and lower sash can work properly.

DOORS

Outside entrance and vestibule and store doors (including side lights) to be White Oak with heavy laminations, using waterproof cement. Turn in paraffin in top and bottom of these ^{soft} inside doors before finishing. All of approved shop drawings to be 1 3/4" thick.

Office doors according to win schedule to be figured heavy laminated White Oak, with water proof cement used, of design No. 1212 Bead and Cove sticking. Where they are not glazed to have a wood panel for the glass panel.

Doors in the main figured as 2'10" x 7'0" but if 2'10" x 6'8" are used the transom to be made 2 inches higher to give same head height.

Alternate bid. Where using fir for the oak. The office doors according to schedule are to be Laminex Fir doors of same size design #281 Flat grain and #31 for wood panel. Bead and cove sticking to be used.

The rear outside doors to the store and offices, also the outside entrance to the Southern Wyoming to be White Pine.

The basement doors in the store for the store sales room and toilet rooms to be Laminex fir, this also to include the exposed doors to the back room on the first floor, also the door to the Store Managers office.

The metal clad doors in the store basement are to be well made of triple thickness, seasoned and dry pine shiplap. The middle layer at right angles to the outside.

Screws to be used around the outside, all to be full length boards. Lined with sheet asbestos and covered with heavy tin. To have a suitable gravity track arrangement fixed to open and close under normal conditions and to have a fusible link for automatic closing.

The metal clad doors to the furnace and coal rooms to be well made out of two thicknesses lined and covered as above. These to be on hinges, having a spring for self closing.

The inside doors in basement to the shower room, the back hall and front hall off the Southern Wyoming Electric, also the Compensation Department to be best grade of stock for doors similar to other doors in design.

This to apply also to the door to the dark room in the Engineers Department on the second floor.

THE EXIT DOORS

The exit door from the Engineers Supply to be pine. The exit door from the Auditing Department to be pine outside and heavy laminated with waterproof cement inside finish to correspond with the inside trim.

STEEL SASH

All steel sash are figured for Truscon, but Fenestra, Lupton or other approved sash can be used of the same sizes. All of standard industrial type with push bar operating arm where not too high. Chain operations where high, complete with all necessary hardware.

Proper arrangement for fastening to all steel work to be provided. All to be tight when completed.

The small sash in the basement to be hinged about 1 1/2" from the bottom and swing in. The others to have standard pivot.

The basement sash to have top latch with pole hook ring and arm at the side to hold in place as shown on sheet A-6 Truscon literature of Drafting Room Standards.

Metal lath and plaster used at the head in most cases. The sill to be beveled on approximately 45° and the sides to have the plaster returned with metal corners used.

DEADENING FELT AND INSULATOR PAPER

Two layers of approved brand to be used under all maple floors, the felt to weigh 1 1/2 lb to the yard, except where over the concrete slabs, where a heavy asphalt insulator paper of approved brand to be used under the maple floor. To be well lapped 6" at sides and ends, any and all breaks to be covered by a

TEMPERATURE RECORDS

METAL LATH, METAL CORNERS AND BASE SCREWS

lathes on each side of eave. Metal lath around window frames, all furring around structural beams and columns. Provide and install an approved metal corner bead for all vertical sill and angles to be securely nailed in place, straight, true and plumb.

All beams in all rooms when lathed, to be similar and same size as far as possible to give a uniform appearance.

All metal lath, base screws and corner beads to be furnished and installed by the carpenter.

Metal lath to be used on all ceiling, soffits of stairways and exposed side, all wood partitions for store toilet rooms, side walls on the entrance and stairway hall, also for all plastering around the stairway. The rooms on each side of the entrance and stairway to have metal lath on the wall on the entrance bay side, also both sides of the partition for rear unloading room on the Main Store floor and both sides of all work around the elevator. All other inside partitions to be wood lath.

GENERAL LATHING

All walls not mentioned above shall be lathed with No. 1 Redwood lath spaced $5/16"$, all securely nailed with 3d fine nails. The backing in all cases must be solid and the corners solid. Lath are not to run through from one angle to another, nor will any vertical lathing be permitted. All lathing must be horizontal and the joints broken not more than 18 inches. The joints will not be permitted to be broken over either side of an opening.

PLASTERING

Cover all walls and ceilings in general with an approved brand of cement plaster and good clean sharp sand mixed according to the ^{directions} ~~maximum~~ of the manufacturers. The plastering to be three coat work, dry between coats. The second coat to be brought to a true surface with a straight edge. The under coats shall be broomed to give a good surface the following coat. All corners, angles, etc., must be true, square and plumb as the case may be. All work made to suit all

grounds, and the plasterer is to insist on having grounds wet. All wood laths are to be thoroughly wet, also the brick work and concrete before plastering. The first two coats are to be brought to the floor in all cases. Workman shall cut all vertical and horizontal corners as directed.

The finish coat shall be given a sand finish. Sand to be used shall be clean sharp sand through a 10 mesh screen, worked and floated to give a true uniform finish, without large rough and smooth spots.

The ceilings are to be carefully worked especially on large areas and the whole is to present a neat, finished and true surface.

All toilet and shower rooms are to have the walls and ceilings finished smooth. Same finish as the sand finish but a small percentage of hydrated lime added. No trowel marks to show.

Vault to be given one coat of Portland cement plaster, sand finished.

Furnace, coal room, basement receiving room and all concrete walls of the stock room are to have all ^{imperfections} fixed up with Portland to give a neat concrete wall. All wires to be cut.

The display room to have the ceiling plastered on metal lath, also on the metal on the floor joists of the display rooms, the Mezzanine and wood partitions in the stock room are to be plastered same as rooms and given a sand finish, which will also apply to the Bargain department in the store basement.

PAINING

All steel work to receive paint as required under special specifications.

All wood work enclosed or in direct contact with masonry or concrete work to receive a good coat of creosote paint before installing.

All galvanized work to be washed with diluted acid sponged off and given one coat of tector and three coats of lead and oil.

Colors may be selected for any and all colors. All exterior wood work to be given three coats of lead and oil of selected color. All interior trim to be four coat work, stain light brown of approved shade. Fir to have a liquid filler, and oak to have paste filler, fillers to be stained approved shade, then a coat of shellac and then two coats of McMurry's Rubber Floor Varnish.

The store to have four coat work of approved color on the pine trim.

The display windows to be four coat enamel work. Two coats of flat then one coat of half and half tinted and one coat of enamel on the wood work and ceiling. The ceiling to have three line painted border, and the wood work molding to have a little color decoration.

The floors to be filled, one coat of shellac and two coats of McMurry's Floor Varnish.

The celotex to be painted with flat coat paint two coats after filler or size is applied.

The ceiling on the ^{Marquise} ~~Mausoleum~~ to have the plaster painted three coats of outside white tinted selected color on a tinted size.

All plastered walls and ceilings on the entire first and second floors, and basement except the Stock room, Receiving room, Boiler and coal rooms to be painted. The inside walls of the vault are not to be painted.

All plastered walls in general are to have a coat of tinted size and two coats of approved flat wall paint of selected colors.

The toilet rooms and shower rooms are to have one coat of varnish size and two coats of approved brand wall enamel of selected color. This to apply also

for the toilet alcove in the basement. The toilet compartments to be painted to match the rest of the painting.

The Main store to have the beams, columns and pilasters decorated as shown on the plans. Also a three or four line border on the ceiling for each bay, and a design around each light fixture. All to be of approved colors and design. The work being in the nature of a stencil work and straight lines. All to be of a neat design. Frame all window and door frames and let thoroughly dry before installing in masonry. All trim to be painted on the back.

All knots to be filled with shellac before painting, see that all nails are properly set and puttied, putty up all holes and cracks, filling them full and even. The painter will be required to clean all paints and tinting spots that may be found on the walls, ceiling or wood work after his work is completed. Leaving the entire job in a clean and perfect condition. The painter will also clean all glass of paint, dirt or varnish and polish same.

He shall be held responsible for the condition of any work he may cover. He shall have the carpenters fix any and all defective material and work before covering. Should he fail to notify the Engineer of defect or improper condition of material it will in no way relieve him of the responsibility.

All materials must be applied under the best weather conditions, in a careful and workmanlike manner. All paint and material to be best grade. Painting to have proper time between coats.

All paint material to be delivered on the job in the original cans and to be approved.

All outside steel doors are to be painted three coats in all.

REPAIRO ON FLOORS

Kreath

All maple floors and stair ~~steps~~ to have an application of Repalle, which is a penetrating oil mixture. The Repalle to be applied according to the manufacturers instructions.

(1) Also quote the price for treating the concrete floors and steps for the entire basement, all vault floors and the rear receiving room of the store on the first floor, also the Office entrance.

(2) Also quote the price for the Main Store floor and stairway to the basement to be treated with Repalle.

GLAZING AND GLASS SETTING

All interior sash, transoms and doors to be glazed Syenite or Florentine with the exception of those between the Clerk and the General Office on the first floor, the Chief Engineer and the Drafting room and the General Store Managers office which are to be glazed E.S.A. Libbey Owne.

Doors and windows to be glazed with wood stops and back puttied.

All exterior sash in general for the first and second floors to be

glazed with D.S.A. Libbey-Owens glass, secured with zinc points and puttied, taking proper precautions to see that putty sticks. All the basement sash and doors are to be glazed Syenite or Florentine, and the Truscon basement windows are to be glazed with wire sheet prism glass.

All glazing for the metal sash to have regular glazing clips, and putty for metal used.

The entrance at the rear of store to have wire glass used, and the Store and Office front entrances to be plate as shown.

The store front windows to be suitable polished plate glass in a wood setting as shown, bedded in putty and a neat 1/4 inch thick plain iron setting with suitable square piece to cover joints at corners and intermediate joints. The iron strips to be bored in field and round head screw used. The iron is to be painted a selected color. The wood at the sill of the show windows on the outside to have suitable iron covering.

The upper lighting sash for the store are to be sheet prism glass in a wood setting as shown. The end sash are to be hinged.

CAST STONE

All cast stone to be the best grade of workmanship and approved samples submitted.

All to be well made, true and proper dimensions and shapes.

Facing to be approximately 1 to 1 1/2 and at least 1/4" thick.

Backing to be 1 to 5, pea-gravel aggregate to be used. The facing to be put in and the backing well tamped against it to give a perfect bond.

All upper exposed drips and sills to be well troweled.

Color to be white and white Portland cement used. Face to have approved texture and color aggregate.

Facing to be properly cleaned by brushing and washed down to give a nice effect.

Best grade of material and labor to be used in the construction.

All to be laved with a close joint and approved solar mortar used.

All necessary reinforcement and anchors to be taken care of.

SLEEVES AND SUPPORTS

The General contractor shall put in all sleeves and supports for plumbing and heating. The Heating and Plumbing Contractor to furnish sleeves and supports and locate same as the work progresses. All provisions for plumbing and heating to be carefully located so as to avoid unnecessary cutting and drilling. Reinforcement to be arranged accordingly and not to be cut and weaken things later.

ELECTRICAL WIRING AND FIXTURES

These specifications contemplate and provide for the installation of a electric system of wiring for the entire building. This work to be done by the Owner. The contractor to make provision for the main distributing panel and entrance box.

SOIL TESTING

The contractor shall make provision for testing the soil shall same be required by the Engineer after excavations are made and footing may be changed should the Engineer deem it necessary.

TOILET COMPARTMENTS

The toilet compartments are to be handled under the Plumbing and Heating contract, but the General contractor shall make the necessary provisions for them.

HARDWARE

All hardware not mentioned to be of a suitable approved kind to match other hardware. The general contractor shall provide and install all other necessary shelf and rough hardware.

BUTTS

All 1 3/4" outside doors to have three and inside doors to have two 4 x 4 ball bearing Stanley Butts. The three butts to also apply for all doors with checks. The screws for all check doors to be ample in length and not to be hammer

driven. All to be dull brass finish.

DOOR CHECKS

All toilets, toilet vestibule, vestibule, shower room, outside entrance doors, front and rear to the offices, door to the basement and the front entrance to the Store to have Harleigh Diamond Door checks, size "D". The outside and vestibule doors to have hold open arms with a range over 90° including necessary brackets.

WEIGHTS AND SASH CORDS

All weighted windows to be neatly balanced with sash weights and #10 Sampson's Spot Sash Cord. All pulleys and double hung window frames to be solid wheel and turned axle secured into stiles with screws.

SASH LOCKS

Genuine Pitch sash locks cast iron dull brass finish E.A. #222.

BAR SASH LIFTS

Cast bronze 4 x 1 3/4 Dull brass finish E.A. #296.

TRANSON LIFT

Dull brass finish, simplex size 5/16".

GENERAL HARDWARE

All interior hardware to be dull brass finish. All locks masterkeyed.

General list following and hardware must be as listed or its equal.

All hardware Sharpleigh Hardware Co., St. Louis, Cat. No. 220 or equally as good.

LOCKS

All doors in connection with the office part of the building to have the following lock except as noted otherwise.

Cylinder office door sets Sparta Design Cast Bronze Trim (never lock on the inside) each masterkeyed. Set E.A. 29237 to have 4 master keys. The three sets of doors to the Southern Wyoming in the basement to be keyed the same.

The door to the basement have inside set No. E.A. 29200, also door to

dark room and Blue Print room. All marked 1 on plans.

The furnace and coal room doors to have set No. E.A. 29200 same key.

All office and toilet room doors and door to the shower room to have cylinder that will operate with any of the office keys.

The two doors on the main entrance to be similar to set E.A. 29227 on the outside, without the thumb latch, to just have the dead latch lock, cylinder operating both sides. The back cylinder plates and push plates to be one, also brass kick plate 30 x 10 x #14 gauge. The door not having the lock to have same pull and a dummy cylinder outside, and dummy cylinder push plate inside, also kick plate and a suitable top and bottom bolt.

The rear entrance door to have regular E.A. 29237 set.

Keys to the Main and rear entrance to the office to be such that any of the office keys series will operate it, but no other, ^{is} that it must be a better look than the toilet rooms.

STORE DOORS

The two front doors to be set E.A. 29227 and the rear door to be E.A. 29237 with brass kick plates on the front doors.

All keyed alike not on the Office masterkey. 4 keys furnished for each set.

All other doors to have set E.A. 29200 same key except General Store Managers office which is to be E.A. 29237 with a different key from the outside doors.

Before ordering the entire list it is to be gone over with the Architect in order to prevent misunderstanding.

CASEMENT FIXTURES

Monarch automatic check, with suitable catch to be used on casement windows over the Display windows and Mezzanine floor.

The rest of the high sash windows are to have a suitable pole or chain operation, with Henshaw Automatic appliances.

BAR SASH LIGHTS

Cast bronze 4 x 1 3/4 Ball Brass B.A. 9296.

HARDWARE NOT MENTIONED

Hardware not mentioned including door bumpers to be suitable, approved and to match others. Same grade throughout.

Provide and install other necessary shelf and rough hardware.

HEATING AND PLUMBING

To be let separate.

Notes- While the plumbing and heating is let separate this shall not prohibit the General contractor from bidding on the same, but he shall keep his figures separate.

The contractor contemplating the undertaking of the proposed work will be provided with proposal blanks and he is required to fill out these blanks and make proposals accordingly.

FINALLY

The intention of the drawings and specifications is to have good workmanlike job complete in all its branches, and everything in good working order and repair, acceptable to the Engineer and the Owner. Any omissions apparent implied or necessary to complete the work according to the purport and intent of the plans and specifications, or small details not usually specified but necessary for a neat and complete job are to be figured in on Contractor's bid, and are to be executed the same as if specified.

CALOTEX

All toilet rooms. Inside walls and ceilings shall have a layer of calotex nailed on the studs and then turned with lath and lathed for plastering.

CHUTE IN FURNACE ROOM

The contractor will furnish a suitable heavy iron covered chute for feeding the ~~stoker~~ ^{stoker}, or if the stoker is not installed to have a turn and chute the coal to the outside wall for easy firing.

TOILET ROOM FLOORS

All toilet room floors for the Offices shall be raised approximately 7 inches so the pipes can be run under the floors without cutting any joists. The framing for the floors to be put in after the pipes, etc., are installed.

DOOR HARDWARE

The two vestibule doors at the main entrances are to have a pull on one side, similar to the outside doors, and push and kick plates on the other same as the entrance door, with the lock and bolts omitted.

STUCCO

The stucco to be three coat portland cement work of approved texture and color sample.

DRYING TRAY (Blue Print Room)

The contractor shall build a wood tray out of fir flooring for the bottom and 1 1/2 material for the sides and ends graded to take care of the water, all well supported.

Flooring laid with white lead joints spliced at ends, then covered with Bayonne Deck Cloth #1299 and painted four coats of white lead and oil, all fixed so the plumber can put in a suitable trap and drain.

Tray is to be built on top of the regular floor, and is to be 6 feet wide.

WIRE PARTITIONS

(44)

The contractor shall furnish and install wire partitions in the vaults made out of #10 Wire, 1 1/2" diamonds with steel chapes to stiffen with suitable doors, all necessary hardware fixed for padlocks.

ROOFING

The roof to be absolutely level, and have saddles and cant boards where necessary, all to be tight and no sharp corners or edges. Must conform with the Roof Manufacturers standards.

The roof is to be covered with a Standard 20 year Specification Fabco Roofing, dated Feb. 2nd, 1935. Roofing must be done by the Roofing Company's approved roofer in order to get the guarantee, and the Contractor to furnish the Owner with the roofing company's 20 year bond.

Entire job to give a tight permanent roof.