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GRAND CANYON WORKING PLAN

Uses, Information, Recreational Development

Don P. Johnston, Forest Supervisor
Aldo Leopold, Forest Examiner

December, 1916.

Revised in Accordance with Memorandum of March 17, 1917.

Approved

Apr 9, 1917

Frank W. Poole

District Forester

*See West Fork
Shannon letter
May 14, 1917 to
Johnston
to which this plan
was approved
A. Naughton to make
Supplemental plan
F.W.P.*

O U T L I N E

GRAND CANYON WORKING PLAN
Uses, Information, Recreational Development
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Aldo Leopold, Forest Examiner,
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EXISTING CONDITIONS.

Par. 1 Importance of Grand Canyon.

The Grand Canyon has often been called the eighth wonder of the world. It is undoubtedly the most remarkable and coming to be the most famous natural wonder in the United States.

In normal years it is visited by 25,000 people of all classes and nations. This number is constantly growing (see Par. 26-A.) 100,000 people visited the Canyon in the Exposition year, 1915, and 380,000 have visited it since 1900.

The Grand Canyon is the most important single point of contact between the average American and the Forest Service. From the standpoint of disseminating an understanding of Forest Service work, it is, therefore, the most important single administrative unit within the National Forests.

Par. 2 What Visitors are Subjected to.

In the past visitors have, in varying degrees, been subjected to:

1. Discourteous treatment by business permittees.
2. Local atmosphere of unrest; visitors forced to listen to gossip concerning local bickerings.
3. Offensive sights and sounds, such as electric advertising signs, megaphone soliciting, etc.
4. Unsanitary conditions, such as heaps of stable refuse, accumulated lunch boxes, etc.
5. Inconvenient facilities; no information office; lack of proper trails, walks, toilets, etc.
6. Non-dependable service, such as rate cutting by permittees and failure to keep bookings.
7. Danger of bodily injury, by reason of inferior equipment, unattended teams, and rolling of stones over the rim.

Par. 3 Attitude of Parties Involved.

The public has naturally been critical of the unsatisfactory conditions. The most notable criticism has been a series of articles and editorials in the Saturday Evening Post.

The railroad interests say they do not expect their investments at Grand Canyon to yield a profit as an independent enterprise. Their value to the railroad is as an attraction for transcontinental traffic. They state that the Canyon has not paid except during the abnormal year 1915. On account of the facilities, such as the water supply, over which the railroad has exclusive control, it would be comparatively easy for it to throttle competition, but there has been no disposition on the part of the railroad officials to do this. The railroad interests have, however, naturally been dissatisfied with existing conditions and will probably welcome a rational plan of improvement through better regulation.

The Cameron interests have been bitterly critical of both the Forest Service and the railroad. Litigation over their illegal occupancy has served to keep this feeling alive, but indications point toward an early decision in the Government's favor, which will force them to take their place with other permittees or drop out.

The attitude of the various permittees is in general critical and dissatisfied. It is believed, however, that this plan of regulation, vigorously executed, will meet with their general approval, except in individual cases where compliance with the proposed plan will involve a temporary inconvenience or cost.

Par. 4 Why Abuses Have Not Been Checked.

The outstanding causes of present unsatisfactory conditions have been:

1. Lack of sufficient authority on the part of the Forest Service to handle the situation. (See Par. 22).
2. The network of mining claims on strategic points* and the obstructionary attitude of the claimants. These mining claims have not only prevented the construction of needed improvements but have been used as sites for miscellaneous unregulated enterprises over which the Forest Service has as yet been able to exercise no jurisdiction.

Par. 5 Need for Regulation.

The general regulations applying to the National Forests are not a sufficient basis for a satisfactory administration of the Grand Canyon. Any attempt at regulation must be enforceable. There are two means of enforcement: regulation and permit clauses. From the standpoint of practical administration, both means should be available. This is especially important at Grand Canyon, where some operators occupy mineral locations and hence are not permittees, and where we have no hold, except through regulations, on the visiting public who are not permittees.

At present, even with permittees, the following items are not subject to either means: personal conduct, defacement, and rolling stones. Permit requirements would gain force by being backed by the Secretary's regulations. The general regulations should be supplemented by special regulations adapted to conditions on this area (See Par. 22.)

Par. 6 Why Action Can Now Be Taken.

Of the two causes given in Par. 4 as underlying the abuses heretofore existing, the second is in a fair way to become inoperative through:

- (a) Purchase of the Cameron interests by the railroad
- (b) Pending application for injunction by the Forest Service against occupants of Cape Horn Lode in the Arizona Federal Court.
- (c) Litigation in the U.S. Supreme Court

The status of litigation of the mining claim complications dictates the immediate promulgation of the necessary additional regulations and the putting into effect of a plan of regulation which will remove abuses, result in satisfactory public service, and provide for future development along lines carefully planned in advance.

* Including Rim points, Indian Gardens, foot of Bright Angel Trail, Hermit Creek, Grandview, etc.

SCOPE OF PLAN

Par. 7. What This Plan Covers.

The administrative personnel plan, fire plan, and grazing plan are already operating satisfactorily and are not covered herein.

This plan covers Uses, Information, Recreational Development, and local Administrative Improvements only.

It takes up in detail only the areas now in use or applied for, but its principles are susceptible of indefinite extension to a greater area and to future developments.

AIMS AND PROVISIONS OF PLAN

Division of Ground Into Zones

Par. 8. Need for Zones.

The public visits the Grand Canyon to enjoy a great spectacle of nature.

At the same time the public needs and demands certain material services and conveniences.

The latter are necessarily out of harmony with the surroundings, and it should be the first object of an efficient administration to reduce this necessary discord to a minimum. There are two obvious means to this end.

First, reduce the offensiveness of material service as far as possible (See Par. 11 - 15).

Second, segregate the various classes of service according to the degree in which they are objectionable and remove them to the background as far as compatible with public convenience. To accomplish this segregation the following zones are proposed:

Par. 9 Definition of Zones and List of Uses to be Allowed in Each.

1. Rim Zone. (Includes all of rim at terminal and all vantage points on rim anywhere within the National Monument.) Trails, walks, seats, observation balconies, rests, shelters, range-finders, and information signs only.

2. Accommodation Zone. Hotels, club houses, cottages (for rental to visiting public only), livery offices, landing blocks, loading corrals, and shops dealing in photographs, paintings, Indian goods and curios of local interest. Photographs includes moving pictures of the Grand Canyon.

3. Residence Zone. Private residences and cottages. The school house, church, and tennis court sites also fall within this zone.

4. Commercial Zone. General stores, garages, barber shops, amusement halls, ordinary moving picture shows, billiard rooms, manicure parlors, peanut stands, soda fountains and quick lunch counters.

5. Seasonal Camp Zone, where those who wish to erect a cheap tent house or other temporary quarters may be accommodated.

6. Public Camp Grounds, where tourists may stop for temporary camping.

7. Stables Zone. Corrals and stables of livery-men, temporary or permanent.

For extent of approval of zone system as first suggested see Mr. Stuber's letter May 14, 1917 to Mr. ... See also Dr. Mangels' 1918 plan for ...

Not approved or to be removed. Livery office a ...

Par. 10 Discussion of Zones.

The foregoing classification should not prevent superior use of an inferior zone.

No argument seems necessary to support the foregoing classification, except with respect to the following:

Curio Shops in Zone 2. From the viewpoint of pure esthetic theory these belong in Zone 4. But from a more practical viewpoint the following facts must be recognized:

a. The average tourist regards the curio shop as a museum rather than as a store. He visits it for pleasure, not for utilitarian purposes.

b. The existing curio shops are in Zones 1 and 2 (Verkamp, Hopi House, Kolb, Look Out.)

c. In external appearance, curio shops can be made more compatible with Zone 2 than other stores.

Curio dealers will not be able to abuse locations in Zone 2 by branching out into General Merchandise by reason of the fact that the proposed regulations authorize the regulation of character of service (See Par. 22.)

Livery Offices in Zone 2. The average canyon visitor looks on livery service as an essential part of his Canyon trip. He wants to make his arrangements without loss of time or unnecessary inconvenience; and as he will confine his limited time to Zones 1 and 2, the livery offices should be located there. Moreover, the Company bookings are made in this zone, and to place other operators elsewhere would be unfair.

Cottages in Zone 2. Rates at Grand Canyon Hotels are necessarily so high as to prevent people of moderate means from making more than the briefest visit. Housekeeping cottages are the only means for accommodating such people. Cottages in other zones would not attract them.

Zone 3. Convenient water and a desire to be centrally located will automatically confine permanent residences to that part of Zone 3 south of the tracks, while the view will confine visiting cottagers to that part to the east nearer the rim.

Practicability of Adjusting Present Uses. No legal or permanent structure will have to be moved now, Kolb's Studio, which is in the Rim Zone, will ultimately have to be rebuilt further back.

Nature of Structures.

Par. 11 Why and How to be Regulated.

All of the permanent Company buildings are unobjectionable except the Power House. Many of them are exceptionally attractive. As long as the Company's work is passed upon by Miss Colter, its present architect, its appropriateness can be considered assured.

Most other structures now existing are objectionable in various degrees and ways.

Under Clause (6) of the new permits (See Par. 23) all future construction should be made to comply with the strictest standards, and all existing structures maintained so as to be as unobjectionable as possible.

While future structures in Zones 1 and 2^{and 3} will naturally have to comply with a higher standard of appearance than elsewhere, no permit for an unnecessarily ugly or objectionable building should be issued anywhere for any purpose. This does not mean that architectural or cost standards are to be enforced against stables, box-car

Not approved. Pickney & ... in ... but Curio location not to ... normally recognized.

shacks, but that, with due regard for nature, purpose and location, an appropriate standard of neatness will be the irreducible minimum requirement.

Regulation of Business

Par. 12. Objects and Principles of Regulation.

The objects of regulation of business are to assure the travelling public of adequate service, personal safety, convenience, protection against excessive rates, and prevention of nuisances and annoyance.

The commercial interests of business permittees are not an object. They are a means to the above end.

The regulation of business at the Canyon presents theoretically a range of alternatives varying from absolute monopoly to absolutely unrestrained competition.

Monopoly, however, is not compatible with the Forest regulations or ideals, and would be repugnant to many visitors. It relieves the favored party from the losses through mismanagement, and is, moreover, not apparently desired even by those in a position to profit by it.

Unfair competition in the form of unequal assumption of responsibility to the public is incompatible with stability and quality in service.

The proper principle of regulation is undoubtedly a competitive system with uniform requirements as to service stiff enough to assure quality and stability, and an equitable distribution of responsibility to the public. In so far as known, there is no divergence of opinion up to this point. The question is, what particular scheme of regulation and just what requirements will be both practicable to enforce and effective in securing the results desired?

The first thing to consider is our own limitations. What kind and degree of regulation are we prepared to handle?

We are not prepared to handle any scheme necessitating a detailed knowledge of lines unfamiliar to Foresters. We could not, for instance, attempt to prescribe the current prices of merchandise. We would, however, know when prices became obviously excessive. The conclusion is that we should not (except for livery service) attempt to prescribe rates, but we should reserve authority to reduce excessive rates. The rest should be left to competition.

(1) Again, we are not prepared to keep track of the current cost of operating a certain livery outfit, but if the operator were to charge a tourist \$5.00 for a trip advertised by him at \$4.00, we would know there was extortion. Standard charges by first class outfits for regular trips can be established as maximum rates, provided such maxima are made adjustable to changing conditions as to feed costs, labor costs, etc. The conclusion is that livery permittees should be made to adhere to published schedules and rates, subject to adjustable maximum rates for regular trips. The rest can be left to competition.

(2) Again, we are not prepared to judge whether a new general store should carry a \$10,000 or a \$12,000 stock of goods, nor with certainty whether an additional store is needed to

accommodate public demand. The conclusion is that we should not in general attempt to prescribe the size or regulate the number of business enterprises. We can, however, assure operators that competitors will not be admitted unless they assume their share of responsibility in serving the public and in maintaining conveniences jointly used. In rare cases it will be obvious that the admission of competition will cause a net reaction unfavorable to good service. In such rare cases we should have authority to deny permits.

Again, suppose there were no place for the travelling public to get emollients for sunburn. We could not tell the proprietor of the general store that the public demands that he carry a certain specific brand; but we could require him to carry a simple line of drugs. In all probability he would do so anyhow. We should, in the interest of the public, have authority to regulate the character of service, but should exercise it with discretion.

Again, supposing an applicant for livery permit were known to have a doubtful character or a bad reputation. In all probability the public would not be properly served by such a person. We should have authority to reject applications from unreliable or disreputable persons.

The proposed system of regulating business is implied in the foregoing examples, and outlined in more logical form in the following paragraphs.

Par. 13. Insuring Service, Safety, and Convenience.

<u>Means</u>	<u>How Enforced</u>
(a) Liverymen must have permitted equipment available yearlong	Permit Clause 9.
(b) Liverymen must adhere to published schedules, rates and office hours	" " 12.
(c) Equipment and animals used by liverymen must be up to stated standards, kept in proper condition, subject to inspection.	" " 11.
(d) Traffic Regulations must be observed by all	Regulation 2.
(e) \$5,000 Indemnity Bond against injury to patrons	Permit Clause 3.
(f) Rolling stones over Rim prohibited	Regulation 2 (c).
(g)	

Par. 14. Controlling Rates.

<u>Means.</u>	<u>How Enforced.</u>
(a) Reserving authority to control rates	Regulation 1.
(b) Prescribing maximum livery rates	Permit Clause 12.

Par. 15. Preventing Nuisances.

(a) Sanitation	Permit Clause 14.
(b) Livery soliciting	" " 13.
(c) Advertising and general soliciting	Regulation 2 (b).
(d) Defacement	" 2 (d).
(e) Reputable permittees	" 1.
(f) Hagging over rates (Adherence to Schedules)	" 1.

Financing and Regulating Improvements

Par. 16. Principles and Necessary Concessions to Expediency.

In principle, the Government should construct and maintain all needed improvements which do not bring a direct return to or form an integral part of a private commercial enterprise.

In practice, private parties have constructed and are maintaining practically all except administrative improvements. Roads, Trails, and rim development to a claimed value of \$204,000** (exclusive

-3-of maintenance) have been built by the railroad interests alone.

**See Ford Harvey's letter Dec. 23, 1916, in files.

Private parties, especially the Company, can do this work economically by using available equipment and men at odd times.

The Forest Service has not had the funds to do this work in the past. There are no grounds for supposing that it will have more funds in the future. Development must keep pace with increasing use. The practice heretofore followed must therefore be allowed to continue as a concession to expediency. Private interests, of course, get some indirect return from anything that improves the Canyon.

*Instructional unit allowed
Per by Sect
Instructional
Canyon 7/28/17*

In accordance with the foregoing:

FOREST SERVICE WILL UNDERTAKE:	PRIVATE INTERESTS WILL BE ALLOWED TO UNDERTAKE:
Administrative Improvements	Park Developments
Road & Trail Surveys and Estimates	Rim Developments
" " " Maintenance Supervision	New Roads and Trails
Collection of Road & Trail Assessments	Road & Trail Maintenance
To Contribute to Road Maintenance Fund	
To extent of offsetting wear and tear incident to their use by the general public not patronizing livery outfits, and so far as possible beyond this point.	

Par. 17. Maintenance of Existing Roads and Trails.

The Rim Roads at Grand Canyon do not appear on the county records as public roads. They bring no appreciable direct return to any large body of local people. It is therefore unlikely that the county or state will ever undertake their maintenance.

As pointed out in Par. 16, Roads and Trails will have to be maintained principally by the commercial enterprises which use them, namely, the livery permittees. There are three alternative methods of distributing the burden:

- (1) Tolls Cumbersome, expensive to collect, inelastic. Rejected as impracticable.
- (2) High Livery Permit Charge. Receipts would accrue to U. S. Treasury, and reappropriation would depend on Congress. Rejected as impracticable.
- (3) Cooperative Fund. Assessments based on use.
 - (a) By tallying actual daily use. Impracticable for same reason as tolls.
 - (b) Assessment based on number of transportation units held under permit. Believed to be the only practicable plan.

The proposed workings of method 3 (b) are as follows:

1. Forest Highway Engineer to make an annual advance appraisal of maintenance work necessary on Hermit Rim and Grand View Road Systems and permittees to be notified annually in advance of their pro rated share.

2. The Company built, and is the heaviest user of the Hermit Rim Road, has been maintaining it, and under this plan is to continue its maintenance to extent of Engineer's estimate, any surplus in Company's pro rata assessment to be applied to maintenance of Grand View Road system.

3. Other livery operators' assessments to be used in

maintenance of Grand View Road System.

4. All maintenance work to be under supervision of Forest Service. In the case of the Hermit Rim Road, this supervision may be merely nominal, as long as past quality of work continues.

5. Assessments to be based on number of permitted transportation units. Assessments enforceable under permit clause 2 and Regulation 1. Transportation unit defined as follows:

- 1 Unit = 1 team horses
- = 4 saddle horses
- = 1 light auto in Ford class
- = 1/2 heavier autos

Trail stock not to be considered in road assessments.

6. Forest Service to contribute at least to extent of offsetting maintenance charge due to non-commercial usage.

7. Question of whether maintenance work is to be contracted, how and where and in what form applied, and all engineering questions, to be settled from year to year, according to conditions then existing, by Highway Engineer.

Par. 18. Formula for Calculating Assessments.

Under the foregoing premises

- Let HR = Hermit Rim Estimates (Work to be done by Company)
- GV = Grand View Estimates
- FS = Forest Service Funds to be contributed.
- A = HR + GV - FS
- T = Total Number of Assessible Transportation Units.
- X = Any Operator's " " "

Then

Company Assessment for Grand View = $\frac{A \cdot X}{T} - HR$

Any Other Operator's Assessment for Grand View = $\frac{A \cdot X}{T}$

The following conclusions are obvious, from the above formula:

If HR is greater than the company's regular assessment they contribute nothing toward Grand View.

FS goes to maintain Grand View. This is equitable, inasmuch as we are trying to cover wear and tear by overland tourist cars, and these are not allowed on the Hermit Rim Road.

The following example will elucidate the working of the formula. The figures are based on a rough guess at 1917 conditions.

Example of Workings of Formula

- Let HR = \$1200
- GV = \$1500
- FS = \$200
- A = \$1200 + 1500 - 200 = 2500
- X = 70 units for Company
- = 10 units for W. W. Bass
- = 5 units for John Doe
- T = 85 units

Then

Company assessment for Hermit Rim	=	-----	\$1200.00
" " " Grandview	=	$\frac{2500 \times 70}{85} - \1200	= 859.00
Total	=	-----	2059.00
Bass assessment (for Grandview)	=	$\frac{2500 \times 10}{85}$	= 294.00
John Doe " (for Grandview)	=	$\frac{2500 \times 5}{85}$	= 147.00
			<u>\$2500.00</u>

A - - - - -	\$2500.00
FS - - - - -	200.00
Total Fund - - - - -	2700.00

- (e) Information Office with Permanent Exhibits, Fire Map, Pictures, Literature, etc. (Par. 73-A)
- (f) Wireless Telephone Line Across Canyon (Par. 76-A)
- (g) Folder Map (prepared but not printed) (Par. 75-A)

New Construction Pending or Needed

Par. 19. Projects for Convenience of Public and Commercial Projects.

Under the policy proposed in Par. 16, the following is a summary of new construction applied for or anticipated. Detailed discussion of each project appears in the appendix as noted in each case:

Project	To be Constructed and maintained under Permit by:	Estimated Cost	For details see Par.
Cottage Rim (walls, walks, etc.)	R. R. Company	\$6000	63-A
Rim Park (west of cottages)	"	\$5000	62-A
Rim Park (at Verkamp's)	Verkamp	?	62-A
Rim Park (east of Verkamp's)	" (?)	\$1000	62-A
Replacing El Tovar Board Walk	R. R. Company	?	
*Housekeeping Cottages	"	(?) large (10 cottages)	58-A
*General Store	" (or other private party)	?	59-A
*Indian Gardens Development	R. R. Company	\$100,000	57-A
*Desert View (Tent Houses)	"	?	60-A
Trail to Yavapai Point	FG S. if possible	\$300	64-A
*Livery Offices	Livery permittees	\$350 each	61-A

*Commercial

Par. 20. Administrative Improvements.

To Be Built By Forest Service. Given In The Order of Need.

Project	Location	Cost	For details see Par.
Information Bureau Office and Exhibit Room	South of Verkamp	\$1500(?)	73-A
Rangers Quarters	East of Terminal	\$3000(?)	79-A
Outbuildings, fences, sewer heat, light, etc. for Rangers' Quarters	" " "	\$1500	79-A
Fireplaces and other facilities on Public Camp Grounds		\$200(?)	68-A
Wireless Telephone (estimates)		\$300	
*Generator and Instruments, Bright Angel R. S.			
*Antennae, Bright Angel R. S.		25	
Instruments at El Tovar		235	
Antennae at El Tovar		25	
Misc. Freight, etc.		200	
*District-4			
Total - - - - -		\$6985	76-A

*Office completed 1917
Exhibition room not built
because no funds
T.E.W.*

*Completed 14 cement
fireplaces. 2 toilets
1918 T.E.W.*

*Completed July 11, 1918 at
Grand Canyon. Antennae
repaired by Dist. 4
T.E.W.*

Disseminating Information About the Forest Service

Par. 21. List of Methods.

In Operation

- (a) Hopi Fire Lookout, with register, literature, etc. (Par. 74-A)
- (b) Lunch Box Card (Par. 50-A)
- (c) Signs (partly in operation) (Par. 770A)
- (d) Camping Permit (Par. 68-A)

Proposed

EXECUTION OF PLAN

Par. 22. Draft of Needed Regulations, and Area to Which They Should Apply.

In order to put the foregoing plan into effect it is necessary to have additional regulations and to make certain existing ones more specific. The following are recommended:

By virtue of the authority in me vested by the Act of June 4, 1897 (30 Stat. 11, 35), as amended by Act of February 1, 1905 (33 Stat. 628) I, D. F. Houston, Secretary of Agriculture, do hereby make and publish the following regulations to be in full force and effect from 1, 1917, on the following described areas within the Tusayan National Forest, Arizona:

All that part of the Grand Canyon National Monument as established by Proclamation of January 11, 1908 lying south of the Colorado River, and all of Township 31 North, Ranges 2 and 3 East, Gila and Salt River Meridian.

Reg. 1 (L).

In issuing permits for any business first consideration shall be given to the public interests and public service, and nothing shall be permitted to interfere with the fullest and freest enjoyment of the area by the public. No permits of any kind shall issue except to reliable and reputable parties, and subject to such conditions with respect to the nature, style, maintenance and location of structures, the furnishing of bond, the character and condition of equipment and service, the making of and compliance with equitable schedules and rates, the orderly and safe conduct of business, and (in the case of livery applicants), the contribution of an equitable proportion of the cost of maintenance of roads and trails, as the Forester may deem necessary for the safety and convenience of the public and the proper preservation of the scenic attractions of the Grand Canyon.

Reg. 2 (T).

The following acts are prohibited:

- (a) Camping without a permit on an area designated for other purposes.
- (b) The posting or displaying of sign boards or advertising material or soliciting for business without a permit.
- (c) The rolling, pushing or throwing of stones over any wall, precipice or slope.
- (d) The defacement of structures or natural Objects by carving, painting, or other means.
- (e) Permitting passengers to enter, occupy, or leave a horse drawn vehicle without the driver thereof being in his seat.
- (f) Driving or leaving vehicles between the Hermit Rim Road and the brink of the Canyon.
- (g) Stopping or leaving vehicles or horses in such a manner as to obstruct free passageway over any road, or ready access to any public landing block.
- (h) Leaving horse drawn vehicles or saddle animals along any road without being hitched or attended.
- (i) Driving vehicles so as to interfere with the line-up of trail parties, which have the right of way.
- (j) Sending out a trail party under any of the following conditions:

1. Unaccompanied by a guide.
2. Comprising more than 10 persons, or more than 5 women or children.
3. Using stock not first broken to the trail on which used by a guide.
4. Using both horses and mules in the same party.
- (k) Using of motor vehicles without
 1. Sounding thornhorn when approaching curves or ridges, or when meeting or passing other persons or vehicles.
 2. Giving horse drawn vehicles the right of way.
 3. Closing muffler outout while passing horses, hotels, or camps.
 4. Displaying front and tail lights after dark.
 5. Stopping engine while the driver is away from the car.

(l) Driving any motor propelled vehicle on the Hermit Rim Road, the Hopi Point Road from the main Ash Fork Road to the Hermit Rim Road, the road from Rowe Well Ranger Station to Hopi Point, and the road from the main Grand View Road to Yavapai Point, except as permitted by the Forest Officer in charge for:

1. The protection of life or property, or
2. The transportation of labor or material between dark and sunrise.

See page 51a - A supplemental sheet inserted showing the regulations as promulgated by the Secty May 22, 1917 and the public note system.

The following are the regulations under paragraph 22 as actually promulgated:

**SPECIAL ADMINISTRATIVE AND TRAFFIC REGULATIONS
GRAND CANYON
Tusayan National Forest**

By virtue of the authority vested in the Secretary of Agriculture by the Act of February 1, 1905 (33 Stat., 628), amendatory of the Act of June 4, 1897 (30 Stat., 11), I, D. F. Houston, Secretary of Agriculture, do hereby make and publish the following special regulations, effective from and after June 1, 1917, for Townships 31 North, Ranges 2 and 3 East, G. & S. R. M., within the Tusayan National Forest, Arizona, in addition to the general regulations applicable to said National Forest.

The following acts are forbidden unless authorized by a written permit given by a Forest Officer:

1. Camping on lands which have been designated by the Forest Supervisor for some particular use.
2. The posting of advertising signs.
3. Soliciting business.

The following acts are forbidden except when specifically authorized by a Forest Officer as unavoidably necessary in connection with permitted improvements or construction work:

1. The defacement of structures or natural objects.
2. Rolling or throwing stones over any wall, slope, or precipice.

Traffic Regulations:

1. No vehicle shall be driven or allowed to stand between the Hermit Rim Road and the brink of the Canyon.
2. No vehicle or animal shall be left in such a manner as to obstruct free passageway over any road or prevent ready access to any public landing block.
3. No animals used for transportation purposes shall be left on any road or public place without being tied or attended, nor shall any horse-drawn vehicle be left on any road or public place unless the team is tied or attended.
4. Trail parties shall have the right-of-way and no vehicle shall be driven so as to interfere with their lineup.
5. Motor vehicles must give horse-drawn vehicles the right of way; must sound horn when approaching curves or the tops of ridges or when passing other persons or vehicles going in the same direction; must close muffler cutout while passing houses, hotels, or camps; must display front and tail lights after dark; must not be left unattended with engine running.
6. Trail parties may be sent out only under the following conditions:
 - (a) Accompanied by a guide.
 - (b) Not more than 10 persons or more than 5 women or children in a party.
 - (c) Stock must be broken or accustomed to the trail on which used.
 - (d) Horses and mules may not be used in the same party.
7. No motor-propelled vehicle shall be allowed on the Hermit Rim Road, the Hopi Point Road from the Main Ash Fork Road to the Hermit Rim Road, the road from Rowe (Well) Ranger Station to Hopi Point, and the road from the main Grand View Road to Yavapai Point, except under permit by a Forest Officer when necessary for the protection of life or property or the transportation of labor or material between dark and sunrise.

In carrying out the foregoing regulations first consideration shall be given to the public interests and to public service. Permits should be granted only to reputable and reliable persons, firms, or corporations and subject to such conditions relating to structures, equipment, service, rates, protection of the public, the furnishing of bonds, contributions toward the cost and maintenance of roads and trails, and payments for land occupied as the Forester may deem necessary for the safety and convenience of the public and the proper preservation of the scenic attractions of the Grand Canyon.

The regulations approved June 14, 1913, the regulations approved February 17, 1917, and regulations approved April 30, 1917, are hereby superseded by the foregoing regulations, effective June 1, 1917.

In testimony whereof I have hereunto set my hand at Washington, D. C., this 22nd day of May, 1917.

(Signed) D. F. Houston
Secretary of Agriculture.



Special Administrative and Traffic Regulations

Grand Canyon National Monument Tusayan National Forest

The following acts are forbidden unless authorized by a written permit given by a Forest Officer:

1. Camping on lands which have been designated by the Forest Supervisor for some particular use.
2. The posting of advertising signs.
3. Soliciting business.

The following acts are forbidden except when specifically authorized by a Forest Officer as unavoidably necessary in connection with permitted improvements or construction work:

1. The defacement of structures or natural objects.
2. Rolling or throwing stones over any wall, slope, or precipice.

TRAFFIC REGULATIONS.

1. No vehicle shall be driven or allowed to stand between the Hermit Rim Road and the brink of the Canyon.
2. No vehicle or animal shall be left in such a manner as to obstruct free passageway over any road or prevent ready access to any public landing block.
3. No animals used for transportation purposes shall be left on any road or public place without being tied or attended, nor shall any horse-drawn vehicle be left on any road or public place unless the team is tied or attended.
4. Trail parties shall have the right-of-way and no vehicle shall be driven so as to interfere with their lineup.
5. Motor vehicles must give horse-drawn vehicles the right-of-way; must sound horn when approaching curves or the tops of ridges or when passing other persons or vehicles going in the same direction; must close muffler cutout while passing houses, hotels or camps; must display front and tail lights after dark; must not be left unattended with engine running.
6. Trail parties may be sent out only under the following conditions:
 - (a) Accompanied by a guide.
 - (b) Not more than ten (10) persons or more than five (5) women or children in a party.
 - (c) Stock must be broken or accustomed to the trail on which used.
 - (d) Horses and mules may not be used in the same party.
7. No motor-propelled vehicle shall be allowed on the Hermit Rim Road, the Hopi Point Road from the Main Ash Fork Road to the Hermit Rim Road, the road from Rowe Well Ranger Station to Hopi Point, and the road from the main Grand View Road to Yavapai Point, except under permit by a Forest Officer when necessary for the protection of life or property or the transportation of labor or material between dark and sunrise.

In carrying out the foregoing regulations first consideration shall be given to the public interests and to public service. Permits should be granted only to reputable and reliable persons, firms, or corporations, and subject to such conditions relating to structures, equipment, service, rates, protection of the public, the furnishing of bonds, contributions toward the cost and maintenance of roads and trails, and payments for land occupied as the Forester may deem necessary for the safety and convenience of the public and the proper preservation of the scenic attractions of the Grand Canyon.

In testimony whereof I have hereunto set my hand at Washington, D. C., this twenty-second day of May, 1917.

D. F. HOUSTON,
Secretary of Agriculture.

The regulations approved June 14, 1915 and effective June 20, 1915, and the regulations approved February 17, 1917, and effective March 1, 1917, are hereby amended accordingly, but nothing herein contained is intended to prevent the application on the above area of all general National Forest regulations not inconsistent with the purpose of the National Monument and not in conflict with these regulations.

In testimony whereof I have hereunto set my hand and official seal at Washington, D. C. this _____ day of _____, 1917.

Secretary of Agriculture.

Par. 23. Sample Livery Permit.

UNITED STATES DEPARTMENT OF AGRICULTURE

Forest Service

SPECIAL USE PERMIT

L
Uses - Grand Canyon
Livery

Permission is hereby granted to _____ of Grand Canyon, Arizona to use the following described lands:

X - Solicit permit as required of Gov. and to be used for this purpose. (Sabin)

and to operate a commercial livery at the Grand Canyon subject to the following conditions:

Payments and Bonds

(1) The permittee shall pay to the First National Bank of Albuquerque, New Mexico (United States Depository), to be placed to the credit of the Treasurer of the United States, in consideration for this use, the sum of _____ dollars (\$ _____) for the period from _____ 19____ to December 31, 19____, and thereafter annually, on January 1, _____ dollars (\$ _____).

(2) The permittee hereby agrees to pay annually in advance to the above designated United States Depository, in accordance with the Act of June 30, 1914, authorizing cooperative contributions to the Forest Service, his proportion of the maintenance of Grand Canyon roads and trails, as estimated by the Forest Service. This payment for the period ending December 31, 19____ amounts to _____ dollars (\$ _____). The permittee will be notified annually, in advance, of subsequent payments due.

Since it is realized that this permit enables the permittee to participate in the business use and advantages of roads built by another livery permittee at a reported cost of \$185,000., future estimates and charges may also include such proportion of the annual capital carrying charge upon this investment or other charges as may be determined by the Forester to be fair and equitable to all parties in interest.

(3.) This permit shall be of no force and effect until an indemnity insurance bond in the sum of Five Thousand Dollars (\$5,000.00), to cover all injury to patrons has been furnished by the permittee and approved by the Forest Service.

(4) The charge for this use (Clause 1) may be readjusted whenever necessary to place this permit on a basis consistent with the charge to other permittees for like privileges.

Improvement and Construction Work

(5) Construction work under this permit shall begin within one month and be completed within three months from the date of this permit.

(6) The location, plans, and specifications of all improvements must be in substantial accord with the application on which the permit is issued and must be approved by the officer in charge in advance of any construction. All improvements must be maintained in a manner satisfactory to the officer in charge.

(7) Upon the abandonment, termination, or revocation of this permit, and in the absence of an agreement to the contrary, the permittee, if all the rental charges due the Government have been paid, may, within a reasonable period to be determined by the issuing officer, remove all structures which have been placed on the premises by him, except where the material was furnished by the Forest Service, but upon failure to remove the structures within that period they shall become the property of the United States. In the event the improvements are removed after the termination or during the life of this permit, the permittee shall place the tract in as nearly as possible its natural condition.

Equipment and Service.

(8) This permit contemplates the use of the following transportation equipment:

Units

_____	teams horses
_____	head of saddle stock
_____	light automobiles
_____	heavy automobiles

(9) The permittee must not load vehicles beyond their rated seating capacity, and must have the above described equipment available for use on demand throughout the year, except as reductions are allowed in writing. Reductions for periods longer than 10 days must be approved by the District Forester.

(10) The permittee must meet any and all demands for trips scheduled by him up to the capacity of transportation equipment on hand in accordance with clause (9).

(11) All animals and equipment are subject to inspection by the Forest Officer in charge, who may condemn until put in condition all such animals or equipment found by him to be unsafe or unsatisfactory or not conforming to the following standards of maintenance:

Animals: Well broken; sound and safe; sharp-shod when necessary.

Wagons and Automobiles: No broken parts; adequate brake; axles greased; laprobes well brushed; footwarmers when needed; upholstery intact; painted and washed as necessary.

Harness: Sound; oiled and washed as necessary.

Saddles and Bridles: Sound, especially as to cinches and stirrup leathers; reins tied or buckled or at least 6' long; saddlestrings complete; oiled and washed as necessary.

Trips, Rates, and Office Hours.

(12) The permittee must submit to the officer in charge for approval by him, a written statement of his office hours, regular scheduled trips, and rates to be charged therefor, which when approved must be adhered to, and may not be modified except with the written approval of the officer in charge.

The Forest Service will establish and make public a schedule of maximum rates, and no rate for any trip will be approved which is higher than the established maximum. The Forest Service reserves the right to raise the maximum rate for any or all trips at any time, but will not lower any such rate except after 30 days public notice in advance of the date when the next payment is due, in accordance with clause (1).

Maximum rates will be modified only to meet changes in operating costs.

The following maximum rates are established until modified in accordance with the above:

Round Trip to	Maximum Rate Per Person	Distance One Way	By
Hermit Rest	\$3.00	8 miles	Wagon
Grandview Point	4.00	14 "	Automobile
Desert View (1 day)	10.00	32 "	"
Bright Angel Trail to River	5.00	7½ "	Saddle
" " Plateau	4.00	5 "	"
Hopi Point	1.50	2½ "	Wagon

Modified to require inclusion specific roads and trails in each permit. See letter 7/28/17 to H. W. Bass.

Sanitation and Care of Premises

(13) The permittee must observe all sanitary laws and regulations applicable to the premises, shall keep the premises in a neat and orderly condition, and shall dispose of all sewage, garbage, and other refuse as required by the officer in charge.

Miscellaneous

(14) The permittee shall comply with all applicable laws and with all laws, rules and regulations covering National Forests including those of special application to the Grand Canyon.

(15) The permittee must temporarily discontinue the use of roads in process of repair, when notified to do so by the Forest Officer in charge.

(16) The permittee shall pay the United States for any damage resulting from this use.

(17) No National Forest timber may be cut or destroyed without first obtaining a permit from the officer in charge.

(18) The permittee shall take all reasonable precaution to prevent and suppress forest fires.

(19) This permit is subject to all valid claims.

(20) The permittee shall provide, whenever requested by the forest officers, a way across the land covered by this permit for the free ingress or egress of forest officers.

(21) This permit may be transferred, subject to such conditions as may be imposed at the time of transfer. It shall terminate upon breach of any of the conditions herein or at the discretion of the District Forester or the Forester.

(22) Should Congress pass legislation transferring jurisdiction over the Grand Canyon from the Department of Agriculture to the Department of the Interior, this permit automatically expires on the date said transfer becomes effective.

Par. 24. Relation to Proposed National Park.

This plan in no wise conflicts with the project of making the Grand Canyon a National Park. The plan contemplates the issuance of no term permits, and the automatic expiration of all terminable permits is provided for in Permit Clause 22, Par. 23.

Sample Soliciting Permit for Permittees using Government Land for Soliciting Purposes.

In connection with your livery permit effective 1917 you are herewith granted permission to solicit livery trade authorized by such permit, your soliciting to be conducted in a quiet and orderly manner without the use of megaphone or other instrument of noise and free from riotous or boisterous conduct or other objectionable actions.

It is one of the conditions of this permit that it does not apply to any area within the Grand Canyon or within 100 feet from the rim of said Canyon nor does it apply to any area held under special use permit by any other permittee unless permission in writing is first secured from said permittee and filed in this office. It is also one of the conditions of this permit that it is issued subject to all valid claims. However, permission to solicit secured from the owner of a valid unpatented claim will not be recognized as authorizing soliciting in the Canyon or within 100 feet from the Rim. The violation of any of the terms of this permit will be considered as just and proper grounds for the revocation of said permit. This permit automatically terminates should the livery permit for any cause terminate or be cancelled.

Forest Officer

I accept the above permit under the conditions stated therein.

Clause 2 Livery Permit (Sample) as amended for Santa Fe Land & Improvement Company Case.

(2) The permittee hereby agrees to maintain the Hermit Trail and to annually contribute his proportionate share, as determined by the Forest Officer in charge, of the maintenance of the Hermit Rim, Grand View, Yavapai Point and Desert View roads, with the understanding that other permittees using these roads for commercial purposes will be required to similarly contribute to their maintenance in proportion to the size of the permitted operations. The permittees contribution for the period ending December 31, 1918, amounts (to One Thousand Two Hundred and Forty Dollars (\$1,240.00)) and notice will be given annually in advance of the amount of future contribution to the road maintenance work. The permittees contribution must be evidenced at the close of each calendar year by a certified statement of road expenditures in the amount set for the closing period, but if for any reason this showing is unsatisfactory or the maintenance of the roads inadequate for the sums expended or the improvements or repairs improperly distributed the permittee's road maintenance contribution may, for any future payment period be required to be paid in advance to the above designated United States Depository as a cash contribution to the specific co-operative fund as provided under the Act of June 30, 1914.

The Secretary of Agriculture's letter of July 28, 1917 in the W. W. Bass Livery 4/29/16 case modifies soliciting permit by substituting the following for corresponding portion sample permit:-

"It is one of the conditions of this permit that the permittee shall not within the Grand Canyon or within 100 feet from the Rim of said canyon accost tourists or other persons either verbally or by giving out printed matter for the purpose of soliciting livery business".

This was occasioned by Bass' appeal objecting to the phraseology of the original permit which he thought would interfere with his acceptance of business that came to him unsolicited while he might happen to be in a prescribed zone although such was never intended. As now worded there can be no misunderstanding on the subject.

A P P E N D I X

Para-
graph

HISTORY OF DEVELOPMENT & USE

- 25-A. - - - Building of the Railroad
- 26-A. - - - Number of Visitors by Years(Graphic Chart)
- 27-A. - - - The National Park Movement

EXISTING BUSINESS ENTERPRISES

Railroad Interests

- 28-A. - - - - -Station Grounds
- 29-A. - - - - -Bright Angel Hotel
- 30-A. - - - - - El Tovar Hotel
- 31-A. - - - - - Hopi House
- 32-A. - - - - - Loading Corrals
- 33-A. - - - - -R. R. Right of Way
- 34-A. - - - - -Power Plant
- 35-A. - - - - - The Lockout
- 36-A. - - - - - Hermit Creek Camp
- 37-A. - - - - - Hermit Rest
- 38-A. - - - - - Garage
- 39-A. - - - - - Transportation Department

Other Permittees and Operators

- 40-A. - - - - - Verkamp's Curio Store
- 41-A. - - - - - Kolb Bros. Studio
- 42-A. - - - - - Bass Livery and Camp
- 43-A. - - - - - Cameron Livery
- 44-A. - - - - - Pepint's Booth
- 45-A. - - - - - Grand View
- 46-A. - - - - - Coconino County House

BUSINESS PRACTICE

- 47-A. - - - -Livery Rates. Tabulated
- 48-A. - - - -Objectionable Practices by Liverymen
- 49-A. - - - -Standards of Livery Equipment and Practice.

Para-
graph

EXISTING ROADS & TRAILS & RIM DEVELOPMENTS

- 50-A. - - - - Bright Angel Trail
- 51-A. - - - - Hermit Rim Road
- 52-A. - - - - Grandview Road and Desert View Road
- 53-A. - - - - Hermit Creek Trail
- 54-A. - - - - Tonto Trail
- 55-A. - - - - Rim Developments

PROSPECTIVE DEVELOPMENTS

- 56-A. - - - - Community Buildings
- Commercial Projects
- 57-A. - - - - -Indian Gardens
- 58-A. - - - - -Housekeeping Cottages
- 59-A. - - - - -General Store
- 60-A. - - - - -Desert View
- 61-A. - - - - -Livery Offices
- Projects for Convenience of Public
- 62-A. - - - - -Rim Parks, S. & N. of Terminal, and at Verkamp's.
- 63-A. - - - - -Rim developments
- 64-A. - - - - -Yavapai Trail

GENERAL ADMINISTRATIVE PROBLEMS

- 65-A. - - - - Water Supply
- 66-A. - - - - Sanitation
- 67-A. - - - - Public Safety
- 68-A. - - - - Public Camping

DETAILS OF ADMINISTRATIVE PLAN

- 69-A. - - - - Administrative Force
- 70-A. - - - - Relation to Fire Plan
- Handling Uses
- 71-A. - - - - -Issuance of Permits. List of Existing Permits.
- 72-A. - - - - -Revision of Present Charges and Areas.
- Information and Publicity Work
- 73-A. - - - - -Information Office and Proposed Exhibit
- 74-A. - - - - -Hopi Tower
- 75-A. - - - - -Folder Map
- 76-A. - - - - -Possibilities of Wireless Telephony as an Educational Measure
- 77-A. - - - - -Sign System
- Living Quarters
- 78-A. - - - - -Need for New Quarters
- 79-A. - - - - -Plans for New Quarters

MISCELLANEOUS

- 80-A. - - - - Game and Fish Plan
- 81-A. - - - - Proposed Revision of Place Names

MAPS AND EXHIBITS

HISTORY OF DEVELOPMENT AND USE.

Par. 25.-A. Building of the Railroad.

The Grand Canyon Railway is a separate corporation from the A. T. & S. F. It was originally built to reach some mining properties south of Grand Canyon, was completed September 20, 1900, and was later purchased at Sheriff's Sale by the present corporation.

Prior to the completion of the railway, visitors were handled by stage.

Par. 26-A. Number of Visitors by Years.

The following curve is based on ticket sales of the Grand Canyon Railway. It does not include the overland motor traffic which has grown very rapidly in recent years. (See Par. 68-A. and chart.)

Par. 27-A. The National Park Movement.

W. E. Bass has displayed in his livery office a U.S.G.S. map of Grand Canyon, compiled in 1911, indicating boundaries of a proposed National Park.

The Interior Department "National Parks Folio" of 1916 includes the Grand Canyon.

A growing movement in favor of a Grand Canyon National Park has been noticeable during the past year, lead by George Horace Lorimer of the Saturday Evening Post. Mr. Lorimer is a frequent visitor and is advocating also the building of a country home for the Press Club on the rim of the Canyon.

The following are examples of press comment:

"BALLYHOONG IN THE TEMPLE," Editorial, Saturday Post, 11/4/16.

"JOHN JONES - GOAT", Van Loan, Saturday Post 6/3/16.

EDITORIAL, Chicago Tribune, quoted by Tucson Citizen, 9/6/16.

The following appeared on the Breakfast Menu at El Tovar, Nov. 17:

"Some day we shall have a Grand Canyon National Park fifty by one hundred and fifty miles in extent, every mile of it full of grandeur and wonder." - Emerson Hough.

The attitude of the Forest Service on the Park question is reflected in the following quotation from the Secretary of Agriculture's Annual Report of December 8, 1916:

"Parks are being advocated where the land should stay in the Forests, while elsewhere areas which should be made Parks continue to be administered as Forests - for example, the Grand Canyon of the Colorado."

The most recent development in the direction of National Park legislation was the introduction in Congress on January 24, 17 of H.R. #20447 by Congressman Hayden of Arizona. This bill is entitled "A Bill to Establish the Grand Canyon National Park in the State of Arizona," and would place the Grand Canyon under the jurisdiction of the Park Service of the Department of the Interior.

EXISTING BUSINESS ENTERPRISES.

Railroad Interests

Par. 28-A. Station Grounds.

An area for station grounds was secured in connection with the railroad right of way. The Depot is partly on the right of way, and partly on the station grounds. El Tovar and the Bright Angel hotel, together with the Hopi House, Lookout, laundry, corrals and Navajo hogans, are located on this area.

Par. 29-A. Bright Angel Hotel.

Room may be secured at the Bright Angel Hotel for \$1.00 per day or \$1.50 per day for two persons. Meals are served a la carte at the lunch counter.

Par. 30-A. El Tovar Hotel.

El Tovar is operated on the American plan, prices ranging from \$5.00 per day up to \$20.00 for special accommodations. It has grown to be a popular meeting place for newspaper men. Several clubs have regular scheduled meetings.

Par. 31-A. Hopi House.

There is some question as to whether the business conducted by the Hopi House is the proper use of the Station Grounds without permit. It should be covered by charge permit, if permit is found to be needed. (D L has under consideration now.)

The Hopi House is a stone structure resembling one of the Tace Indian pueblos and is larger than any of the Hopi houses on the Reservation. It was built in 1905 and serves as curio shop for Fred Harvey. Rugs, jewelry, paintings and almost every sort of curio or relic to be found in the Southwest and Mexico are for sale. There are reproductions of Navajo and Hopi Indian living quarters on the premises. At one place there is a sand painting in the floor, covered with glass. Indian weavers and silver smiths may be seen at work. At 8:00 o'clock each evening there is a free Indian dance. The manager of the Hopi House, on account of his having Indians in his employ, keeps a small commissary from which to furnish supplies in trade or by purchase.

Par. 32-A. Loading Corrals.

Near the Hopi House is a corral in which trail stock is held while being loaded for trail trips. There is also another corral between the Bright Angel Hotel and the Lookout, used for loading Bright Angel patrons. Both of these are doubtful uses of the Station Grounds and may have to be covered by permit. (Under consideration by D L now.)

It is quite necessary to have these loading corrals near both hotels.

Par. 33-A. R.R. Right of Way.

A 200 ft. Right of Way extends from Williams to the Grand Canyon terminal, and includes the switching Y. This ground has been used for unsightly buildings and box-car quarters for section hands, which are in plain sight from El Tovar. The Company officials have agreed to clean up and remove the structures to Zone 5 on the two tracts already held under permit by them.

Par. 34-A. Power Plant.

The power plant which supplies steam for heating all of the Company buildings as well as both light and power, is located near the depot, partly on right of way and partly on the station grounds. The location, design, and color of the structure are unfortunate. Plans are now under way to build a new power plant which is to be in harmony with the other Company buildings. It will be larger than the present one and farther from the hotels, on the south side of the tracks in Zone 7. The right of way is not sufficiently wide to furnish a site for the entire building, and part of it must rest upon Forest land, for which permit should issue.

Par. 35-A. The Lookout.

The Lookout, located on the rim immediately east of the

All within boundary with former track from depot. Not building enclosed by fence and of 1916

head of Bright Angel Trail, was designed by and constructed under the supervision of Miss Mary E. J. Colter of the Fred Harvey concern. It is of stone and seems a part of the rim itself. There are photographs, enlargements, colored folios, books and post cards for sale. There are none of the ordinary curios, and no soda fountain, as one might expect to find in an institution so popularly located. On the balcony overhanging the Canyon is a double barrel telescope of 75 power through which the Canyon and trail parties are observed by tourists almost continuously. The telescope is also used on clear evenings to observe the planets. There are three public writing desks in the main room. Approximately 875 feet of trail has been developed along the face of the cliff below the balcony at a cost of approximately \$300.00 to the Company. The balcony and this trail, together with unique rests and stone seats are open to the public.

A portion of the point on which the Lookout is located is not covered by the station grounds tract, and accordingly a Forest Service permit was issued, covering the telescope balcony, seats, rests and the trail to the lower cliff.

Par. 36-A. Hermit Creek Camp.

Hermit Creek Camp is located 1/4 mile from Hermit Creek eight miles by trail below the Hermit Rest House. It is connected by a telephone line strung on iron posts that has been repaired but once since it was built in 1913. There are fourteen buildings in the Camp group, with a capacity of thirty guests. The average is said to be as low as three or four guests per day. All of the supplies have to be handled on pack mules. Every tourist party which makes the trip between March and October has one mule loaded with ice. There are stables sufficient to shelter forty mules. There is practically no grass and all of the stock feed must be packed. The average price of hay per bale is \$6.25 laid down at Hermit Camp.

The original idea was to build the camp on Hermit Creek. This plan was defeated on account of placer claim locations. All water is packed from the Creek, a Cameron injunction having hitherto prevented the laying of a pipe line. There are 28 acres in the area under permit. *Permit completed in 1915*

Par. 37-A. Hermit Rest House.

Hermit Rest House is located at the end of the Hermit Rim Road and at the head of Hermit Creek Trail. It was built by the Company during 1914. The Company claims it cost \$13,000. The permit covers 25 acres. In addition to the Rest House there are corrals, and warehouses for storing supplies intended to be packed to the camp below. The Company does not consider this as a commercial enterprise, but as an accommodation to the public.

The Rest House was designed by Miss Colter and constructed under her supervision. Its effect is admirable. It is furnished with interesting curios and Indian goods which are not for sale. A log fire is always burning in the magnificent fireplace. Tourists patronizing the Company's transportation department are served beef tea and wafers free of charge. A charge of 50 cents is made to others. This charge is said to be made simply as a matter of regulation.

Par. 38-A. Garage.

A garage has been built under permit on the area immediately west of the depot. It is a substantial stone structure entirely in keeping with the surroundings. The Company owns six Pierce Arrow, one Packard, and two smaller cars, together with trucks for hauling water and supplies. These cars are kept in almost faultless condition all the time. Blankets, rugs, and all upholstery are kept clean. The cars are washed or dusted with compressed air after every trip.

The garage is equipped and operated not only for taking care of Company cars, but also those belonging to tourists. It has room for storage for at least ten additional cars. Ordinary supplies and appurtenances are on hand and for sale to tourists. A high class mechanic is available for custom work. The following rates are posted:

Storage charge for 24 hours - - - - -	\$.50
during day - - - - -	.25
(No storage charge for only a few hours or while work is being done.)	
Mechanic's time - - - - -	1.00
	per hour
Owner of car may use tools, benches and vise for doing his own repair work at a charge of - - - - -	.50
	per hour
(Owner may do his own repair work in the garage free of charge if he uses his own tools and storage is paid.)	
Tire change - - - - -	.50
Punctures and blowouts - - - - -	.25 to .75
Valve stems - - - - -	.50, .60, .75
Gasoline per gallon - - - - -	.35
	(.32 at Williams)
Washing - - - - -	2.00
Polish, additional - - - - -	.50
Water free for radiators and bags in connection with work or storage.	

The mechanic is paid \$15.00 per month with free board, quarters, light, heat and water. The \$1.00 per hour charge to the public for his time includes oil, gasoline or kerosene and waste used for cleaning parts. If this garage continues to be run on its present basis, the probabilities are that competition is not likely until there is much more business than at present.

Par. 39-A. Transportation Department.

The Company has 205 head of driving, trail and work stock, 23 passenger wagons, and plenty of saddles and harness. During the rush season two and sometimes three teams are used for each wagon and driver. A sixteen mile trip to Hermit Rest House is considered a shift for one team, while a driver with the same wagon often makes it both morning and afternoon.

Harness and wagons are washed after each trip. Wagons are painted three times a year and are kept in spotless condition. The quarters for the stock are in neat and sanitary condition, actually being washed despite the high cost of water.

The stables and corrals are located on ground covered by a special use permit.

This department carries equipment in readiness for handling tourists either on the trails or roads any time of year. It is also in readiness to handle excursion parties on short notice. It is often confronted with handling parties who had previously booked with independent liverymen who failed to furnish accommodation at the appointed hour.

(For list of Company cars see Par. 36-A.)

Par. 40-A. Verkamp Curio Store.

In 1905, or about the same time the Hopi House was opened, J. G. Verkamp of Flagstaff, received a permit for one quarter of an acre on which to construct a curio shop. This area was bounded by the station grounds on the west and is on the Buttingki Mining Claim, with the consent of the locator. The building probably cost \$10,000.00 and the stock of curios, rugs, Indian goods, pictures, etc., would probably invoice an equal sum. His store is about 100 ft. from the rim.

Pending the Forester's decision as to limits of Zone 2 and the kind of uses which may be allowed permits therein, additional investment in improvements in this case should be allowed only at the owner's risk. In the event that Verkamp's present location is decided to be permanently satisfactory, the following improvements should be allowed:

Rim Development. Mr. Verkamp is anxious to have his permit extended north to the rim, so that he may build trails, seats, walks and range-finders. He claims that his location is isolated and that it is necessary to develop the rim so as to attract tourists his way. They now usually walk west. The Company has been given a similar use permit for rim developments; and since the Forest Service cannot finance them, Mr. Verkamp's application should be granted. This additional land should be covered by a separate free permit allowing only rim developments.

Painting. The store is at present not of an appropriate color. It should be repainted.

"Independent Sign." This electric sign will be passed on by Dr. Waugh as to appropriateness from the aesthetic standpoint, and if declared objectionable, Mr. Verkamp should be requested to remove it.

Par. 41-A. Kolb Brothers Studio.

Emory and Ellsworth Kolb came to the Grand Canyon about the time the railroad was completed. Ellsworth Kolb seems to have been in the employ of the Company at that time. They took up photography as a livelihood and have performed some of the most daring feats that have been attempted in the exploration of the Grand Canyon. No one seems to question the reliability and genuineness of their work. They built their first office in 1903 on the site of their present structure. For years they confined themselves to photography and the sale of their pictures.

The studio was on land located as a claim by Ralph Cameron, and not until 1912 and after they had made their trip through the Canyon and decided to show motion pictures of their journey did they make application for a Forest Service permit. The rejection of this application seems to have been due to a misunderstanding. Emory Kolb claims that they were referred to as "Kolb Brothers of Los Angeles", although their communication seems to have originated at Grand Canyon and was presented to the Washington Office by Delegate to Congress Ralph Cameron, who at that time seems to have favored their securing a permit. The application was rejected because it involved a picture show, it evidently not being understood that Canyon pictures were to be used. Later another application was made in which their identity and purpose were clearly shown. Permit would undoubtedly have issued had not the application been recalled on account of Ralph Cameron's threat to eject them from claim, should they accept

a Forest Service permit.

During 1914 the original building was remodeled. During 1915 they installed their own electric light plant and during April, 1916 added a water heating system.

Kolb Brothers were asked for information as to the amount of their investment, but it was not furnished. Their improvements probably cost \$5,000.00 or more, and have a probable present valuation of \$3,000.00.

An illustrated lecture of the trip through the Grand Canyon is given daily at 5:00 P.M., admission 50 cents. Colored folios, photographs, enlargements, postal cards, Indian rugs and a few paintings are on sale. On Tuesday and Saturday evenings Vitagraph and Paramount pictures are shown. Dances for the hotel help are given on Wednesday nights. They complain of having to close their soda fountain on account of the Pepin stand which was recently opened. They now desire to install pool tables.

The Kolb building is unfortunate both as to design and location. It does not belong on the rim. If the building were of a fitting architectural design and conducted as one would expect to find a studio, the location might be overlooked, at least the life of the existing improvements. However, the continuance of:
(1) commercial enterprise at the exact head of Bright Angel Trail,
(2) building entirely out of harmony with the surroundings, and
(3) entertainments of mixed character, cannot be indefinitely allowed.

In considering the action to be taken, it should be kept in mind that Kolb Brothers were given to understand that had their application of 1912 stood, a permit would have been granted. Even at a recent date they have been given to understand that permit would issue as soon as the litigation with respect to the Cape Horn claim was terminated.

On November 8, 1916, at 5:00 P.M., Emory Kolb gave an illustrated lecture to an audience of 12 persons. Advantage was taken of every opportunity to enlarge on the obstacles that had allegedly been placed in the way of Kolb Brothers by the Company and the Government. At least three times it was intimated that the Forest Service had permitted the large corporation to impose upon them - that it allowed unfair competition and the sale of unreliable curios. This last statement was doubtless aimed at Pepin's allegedly spurious bottles of sand. Even the Geological Survey was criticised for errors in maps.

At the lecture Mr. Kolb referred to their Grand Canyon book as having a foreword by Owen Wister. It is understood that Mr. Wister wrote this foreword before he had visited Grand Canyon. Later he found that he had been misinformed and withdrew it. It does not appear in the second edition, but this was not mentioned in Mr. Kolb's lecture.

It is said that the Kolbs formerly solicited in railroad trains and that this was stopped because of abusive conduct. It is claimed that Kolb was allowed to deliver his wares at the railroad station until his abusive conduct toward employees made it impossible.

There are doubtless two good sides to this question. It should be noted, however, that the Fred Harvey Company which he accuses of trying to grasp all the curio and photography business, has not entered the field of photographing tourists' parties on the trail. This is one of Kolb Brothers' principal sources of income. Exposures are made as the parties leave in the morning and prints are ready when they return. The guides who are in the employ of the Company are in-

See Mr. Sherman's letter 5/14/17 page 7 - where it is decided that Zone 4 better location curio but Verkamp should not be molested but on other hand only allowed to further improve with knowledge that location may some day have to be changed.

See Mr. Sherman's letter 5/14/17 page 10. No interference insisted on until form was filed for all Gov't owned land on rim.

structed and do stop at any point on the trail indicated by Kolb Brothers.

An application dated November 5, 1916, has now been received from Kolb Brothers for a permit for the site now occupied as well as the land used by the Pepin booth, the site of the Cameron livery corrals, and the small tract in the Indian Gardens used for washing prints. They also apply to install pool tables.

The following action should be taken in this case:

- (a) Issue a terminable permit authorizing occupancy of present site actually used, for present uses only.
- (b) Give friendly verbal notice, followed by letter of confirmation, explaining that on account of pending park legislation and non-conformity of their present location and improvements with this plan, it may become necessary in the future to require removal of present improvements and to offer them a new location in the proper zone.
- (c) On account of the above conditions, all further investments in construction or maintenance on the present site must be made at the owner's risk.

See pg. 4 (a) the "affidavit" to be filed for soliciting permit issued.

See pg 4 Mr. Sherman's letter to Emory Kolb of 5/14/17 relative to his determination to issue use + nature of allowed to operate in - restricted until States to clear that permit can issue covered Studio operations

Par. 42-A. Bass Livery and Camp.

W. W. Bass started the livery business in 1884, when he carried tourists from Williams to Bass Camp, 25 miles west of Grand Canyon terminal. He claims to have built a 68-mile road to his camp and 30 miles of trail on both sides of the river at a cost of \$15,000.00 and a ferry consisting of five cables with a capacity of 2,000 pounds, costing \$2,500.00. This tramway connects with a trail on the north side which passes by the Bass mining claims. There are accommodations for 20 people, but the camp is little used. Outbuildings and cisterns at Bass Camp are claimed to have cost \$3,000.00; outbuildings, corrals, etc. at Bass Station on the railroad \$2,500.00. Total \$23,000.00. The roads he built are little used.

See also Mr. Sherman's letter 5/14/17 plus 22 working plan folder

In an effort to get more business, Mr. Bass moved his headquarters to Grand Canyon terminal. He constructed a 16-room house, which he claims cost \$2,500; an automobile road from Grand Canyon Station to Bass Camp, \$1500. He has ten wagons which cost \$7500, two automobiles which cost \$2,250, ten sets of harness, fifteen saddles and twelve horses which cost \$2,425; office \$100, total \$12,275. This should probably be discounted for depreciation. Mr. Bass is endeavoring to sell this place, and it is understood that George Horace Lorimer has under consideration the purchase of it for a country home.

Refund on permit since made can will be closed after legal proceedings on appeal to U.S. Supreme Court terminate. Bass so informed

The water and feed problem has been serious for Mr. Bass. He has a special use permit for residence, barns and corrals along the railway tracks below the terminal. His tanks collect surface water and also drainage from the Company's septic tank, and this is used by his stock for approximately one-half of the year. For the remainder of the year he must buy water at \$50.00 a car of 10,000 gallons. At present he is paying \$14.00 per ton for hay f.o.b. Phoenix.

Mr. Bass claims to have cleared \$21,000.00 during the abnormal year of 1915, but has apparently spent this. He claims to have lost \$1500.00 for the season 1916. Some of this he attributes to litigation.

Mr. Bass feels that the Forest Service has permitted unfair competition by allowing other livery outfits to enter the field without giving bonds guaranteeing standard equipment. He claims that unsafe animals and equipment have been used both on trails and roads. He asks that all livery permittees be required to furnish two bonds, one for \$5,000.00 to insure compliance with the terms of the permit, and a second indemnity bond of \$5,000.00 to cover possible accidents to patrons.

This done. Give new form livery permit. Saw up livery 11/18

Mr. Bass handled trail parties up until three years ago, when he found that it did not pay and has since disposed of his trail stock. His automobiles are not being operated this winter. He is keeping up only two wagons and teams. He is not advertising any of the longer trips, but combining a short east and west trip for \$2.50.

The Company employs a watchman to whom Mr. Bass takes objection. He claims that the watchman bothers him and interferes with his natural movements. Both Mr. Bass and the Company officials state that the trouble has arisen from what was originally a joke. The Company officials have stated that they will move the watchman if the trouble continues.

On the other hand, Mr. Bass seems not entirely guiltless of trouble-making. Emory Kolb claims that in 1910 Mr. Bass pulled a six-shooter on him and was prevented from using it only through the efforts of Niles Cameron. He has insulted the American flag over the Forest Service office in the presence of Ranger Grefe. Cameron's agent and Bass's agent had a fight in front of Verkamp's store (See affidavit in Cameron Occupancy Trespass of May 8, 1916.)

It is interesting to note that Mr. Bass feels that since the Company has purchased worthless mining claims from Mr. Cameron it should purchase from him all of his improvements and livery business together with stock and equipment, so that he may retire from this field of competition.

In 1913 Mr. Bass made application and was granted a livery office between the Bright Angel Hotel and Kolb Brothers Studio on the Cape Horn claim, but was enjoined by Cameron from using the land, and this permit should be revoked as soon as possible without affecting pending litigation. For a time Mr. Bass was allowed to use the Forest Service office for booking passengers. It is claimed that he placed in his advertising literature a statement to the effect that his bookings would be made at the office of the Forest Service. Later he was allowed to construct a tent office on the slope between the Company garage and Verkamp's store. This office is being occupied and used at present. He expects to be allowed to occupy the land for which he was given a permit on the Cape Horn Lode in 1913. Under the Zone system here outlined this will not be possible, but in view of his undisputed equities he should be offered the choice of livery office sites.

Refund not allowed

Par. 43-A. Cameron Livery.

Niles and Bert Cameron, brothers of Ralph Cameron, have operated a livery business with headquarters on the Cape Horn Lode claim. Their corrals are on the rim overhanging Bright Angel Trail. Occasionally manure has been thrown over the rim. There are now manure piles on the rim itself. They have no good stables, and the horses are often fed in wagon boxes and tied to trees.

Cameron operated one Studebaker automobile last summer, which is now in storage, but their advertisements still stand unchanged. Solicitors have announced their trips by megaphone in front of Verkamp's store and have even loaded their patrons at that point. This has been extremely objectionable to Verkamp and is one of the reasons why he makes application for the extension of his line to the rim.

Like Mr. Bass, the Camerons have used roads constructed and maintained by the Company. This fact in itself might not be so important, but they have shown an unfortunate spirit by leaving teams standing in front of the Company loading blocks so that they could not be used by the Company drivers. Due to their operat-

Special Soliciting Permit to Kolb Brothers.

You are hereby granted permission to solicit photographic trade and patronage for a lecture and moving picture show describing the Grand Canyon, your soliciting to be conducted in a quiet and orderly manner without the use of megaphone or other instrument of noise and free from riotous or boisterous conduct or other objectionable actions.

It is one of the conditions of this permit that it is not intended either to authorize or forbid the studio, lecture and moving picture business as now carried on by said Kolb Brothers on the area now occupied by them. This permit, however, does not authorize soliciting upon any other area within the Grand Canyon or within 100 feet from the Rim of said Canyon, nor does it apply to any other area held under special use permit by any other permittee unless permission in writing is first secured from said permittee and filed in this office. It is also one of the conditions of this permit that it is issued subject to all valid claims. However, permission to solicit secured from the owner of a valid unpatented claim will not be recognized as authorizing soliciting within the Canyon or within 100 feet from the rim.

The violation of any of the terms of this permit will be considered as just and proper grounds for the revocation of said permit.

This permit will automatically terminate upon the termination of litigation involving the area occupied by the permittee, at which time the permit will be readjusted.

T. Earl Wylder
In Charge

I accept the above permit under
the conditions stated therein.

ing without permit it has so far been difficult to force compliance with the traffic rules and other regulations. The status of the Cameron interests will probably soon be changed by culmination of legal proceedings to enjoin them from occupying or using the Cape Horn Lode (See Par. 6).

Cameron fined and illegal livery questions terminated
Enjoins from permits occupying Cape Horn Lode

Par. 44-A. Pepin's Booth.

S. D. Pepin, who styles himself a geologist, was at one time in the employ of Ralph Cameron doing assessment work and appearing as a witness at claims hearings. He has built a booth on the Cape Horn Lode at the head of Bright Angel Trail almost opposite the Kolb Brothers' Studio. He has for sale mineral specimens which he claims are from the Grand Canyon; but which, are said to be obtained elsewhere.

Pepin has for sale bottles of sand showing the strata of the Canyon walls. Mr. Emory Kolb states that Mr. Pepin admitted to him that the sands are artificially colored. Pepin is the author of a booklet "Origin of the Grand Canyon". It is claimed that practically all of the data is taken from Bulletin 549 by Noble and Lee. Pepin's booklet sells for 50 cents and probably costs from 3 to 5 cents. He sells postal cards and soft drinks. It is impossible for one to travel the Bright Angel Trail without seeing his cheap unsightly signs. The building which he occupies is of inpainted and unstained pine lumber, and is out of place both as to design and location.

The Cape Horn legal proceedings will, it is anticipated, dispose of his case.

Enjoined. Case referred to U.S. Supreme Court.

Par. 45-A. Grand View.

P. D. Berry perfected title to a 160 acre homestead at Grand View and has sold it to Wm. Randolph Hearst. It seems that Mr. Hearst bought this land with the idea of building a private clubhouse. Mr. Berry rents the property and operates a hotel which occasionally accommodates overland tourists. The hotel has a connection on the Forest Service telephone line.

The Last Chance millsite at Grand View has been patented. The Grand View Millsite, which is probably valid, and is held by the Canyon Copper Company, of which J. H. Page of Phoenix is president, controls Grand View point and the best view of the Canyon in the vicinity.

The Company constructed a bridge across a crevice so that sightseers might safely pass to the outermost point to view the Canyon. The owners of the millsite have prevented the Company from maintaining this bridge. It is now unsafe and should be removed or repaired.

Efforts have been made to keep livery wagons and automobiles from driving across certain mining locations to the principal vantage point. However no recent trouble has been reported.

The road to Grand View is not a public road and being on the National Monument, no easement under Sec. 2477 R.S. could be acquired. (See Par. 17.)

Par. 46-A. Coconino County House.

The County of Coconino claims jurisdiction to the Bright

Angel Trail and employs a resident caretaker for maintenance work and collecting tolls. This caretaker needed a residence and a special use permit was issued free to cover it. It is built on a very desirable location along the railroad opposite the head of Bright Angel Trail. The tract was segregated from an area under permit to the Company. The only real reason for continuing this permit free is found in suggestions for modifying the entire trail status situation (Par. 50-A). Should nothing come of this, a charge of \$20.00 should be made.

BUSINESS PRACTICE

Par. 47-A. Livery Rates, Tabulated. (As now advertised)

Round Trip To	Distance (miles one way)	Cameron	Bass.	Company
Hermit Rim	8	\$2.50		\$3.00
Yavapai Pt. & Hermit	?		\$2.50	
Mojave Point	4	\$1.50		\$2.00
Hopi Point	2½	\$1.00		\$1.50 A.M. \$1.00 P.M.
Hopi Pt. & Sunset View	3		\$1.00	
Sunset View	3			\$1.50
Yavapai Pt.	2½	\$1.00		
Yavapai and Grandeur	?		\$1.00	\$1.00
Grandeur Point	3	\$1.00		
Grand View Point	14 (auto)	\$3.50	\$3.50	\$4.00
Bass Camp	25 (auto)		\$5.00	
Desert View	32 (auto)		\$10.00	\$10.00
Dripping Springs	? (trail)			\$4.00
Hermit Camp	16 (overnight)			\$15.00
Loop Trail	38 2 days (around)			\$22.00
Bright Angel Trail	7.5			\$5.00
Plateau	5			\$4.00

Par. 48-A. Objectionable Practices by Liverymen.

Megaphone Soliciting: The following editorial appeared in the Saturday Evening Post, Nov. 4, 1916. The facts are as stated.

"BALLYHOING IN THE TEMPLE"

"No other experience in that line is quite comparable to visiting the Grand Canyon of the Colorado. Romantic imagination has conceived men suddenly transported to the moon or to Mars. Visiting the Canon is like that. There may be other scenes that match the Canon in grandeur and strangeness, but they are reached only by effort and through stages which prepare one for them.

To reach the Canon you go to bed in the familiar Pullman. In early morning you step out of that commonplace vehicle, and the vast, fantastic gorge lies before you - an aspect of the earth as unlike all other aspects that it is unearthly. It is like being transported overnight to a different planet. The stupendous nature of the scene and the abruptness with which it is disclosed makes a unique impression which no one can ever forget. It is like turning a street corner and suddenly finding yourself in the workshop where the planets were made.

But latterly they have contrived a little overture to this great and rare experience. Hawkers for rival bus lines stand outside your sleeper in the dawn at the rim of the Canon and wake you up by bawling through megaphones the merits of their respective vehicles. This raucous chorus is your introduction to the greatest wonder Nature has wrought on this continent - or perhaps in the World.

The Government might well permit a decent competition between the railroad and the so-called "Independents" but it should not permit this indecency. Beginning a church

service with a free-for-all fight for the front seats would be no more indecent than disclosing the Grand Canyon to the noise of this leather-lunged yamp for trade. The Government, as custodian of the Canon and of the National Parks, ought to insist upon a decent semblance of respect for those sublime manifestations of Nature."

Adherence to Schedules and Rates: The Company advertises standard rates which are in effect year-long. Bookings may be made at the hotel desks. Bass advertises trips and rates, but is often unprepared to make all the trips advertised. Formerly he advertised that bookings could be made at Verkamp's Independent Store. Some misunderstanding put an end to that arrangement. Cameron's Livery advertises bookings at Kolb Brothers' Studio. This likewise seems to have given place to megaphone soliciting. *prohibited now by city regulations*

At the present time both the Bass and Cameron liveries are cutting rates by offering east and west trips - east in the morning and west in the afternoon - at a combined rate of \$2.50. These trips are not covered in the regular schedules, and after the tourist takes the trip he learns that he reached neither Grand View to the east nor Hermit Rest to the west, as he thought, but only Yavapai Point and Mojave Point. An official map showing the location of these points would aid in enabling the tourist to make comparisons before booking.

The "independent" liverymen have no well-located offices, which probably to a degree accounts for the unregulated soliciting. With proper offices it would be easier to control soliciting.

Advertised trips are apparently not taken seriously by some liverymen. Roads are good for automobile travel until the winter storms, still the Bass and Cameron automobiles have not operated since early Fall. Company cars operate on schedule except when prevented by storms. *Bass and Cameron both say business went down*

Liverymen often book patrons in the evening at a cut rate, later find passengers willing to pay more, and leave the first party to find other accommodations.

Par. 49-A. Standards of Livery Equipment and Practices.

During 1915, of the 100,000 visitors, over 20,000 took trail trips. It is safe to expect 30,000 visitors annually during the next three or four years, and at the same ratio at least 6,000 persons will take trail trips. Ninety per cent of these trips will be taken during eight months of the year, which makes twenty-two persons per day to be handled on trails. This number requires three guides.

The Company allows a maximum of eight to ten persons for one guide. If there are more than five women in a party, two guides accompany it. Only mules are used at present. Occasionally horses are used, but mules and horses should not be worked in one party.

The mules are well broken, and any animal showing signs of becoming unruly is hidden over the trail by a guide before being entrusted to another tourist. Only the Company is operating trail parties at present. Much notoriety would follow a serious accident, and every possible precaution seems to be taken.

It is unnecessary to set a standard for wagons and har-

ness, except to see that they are in good repair. The Company has wagons which probably cost \$400.00 apiece, while the Bass and Cameron outfits operate wagons which cost little more than half that sum, but are nevertheless sufficiently strong and comfortable to handle tourists satisfactorily.

Both Bass and Cameron drivers leave their teams standing unattended at loading blocks along the rim drive, hitch a team to a tree along the roadside or in some cases drive the wagon off the road on to the points. All of these practices are unsafe, and are prohibited in the Traffic Regulation. (See Par. 22).

ROADS TRAILS AND RIM DEVELOPMENTS.

Par. 50-A. Bright Angel Trail.

It has not been deemed advisable to attempt to enter into a cooperative agreement allowing forest officers to use the trail free of toll in view of the unsettled status of the trail easement.

The Bright Angel Trail seems to have originally been an Indian trail, built and used by the Havasupais. It apparently derived its name from the fact that it reaches the Colorado River at the mouth of Bright Angel Creek. The original location was by P. D. Berry in alleged compliance with the Arizona toll road laws. All Berry's rights were subsequently acquired by Cameron. There has been a large amount of litigation in the Territorial Courts, to which the United States has been a party, with respect to the validity of the original location, its transfer to Cameron, certain extensions of the franchise by Coconino County, and certain curative legislation passed by the Arizona Legislature. The Supreme Court of Arizona upheld Cameron's franchise, which finally expired some years ago, when the trail passed to the county. For a few years thereafter Miles Cameron as agent for the County continued to manage the trail and collect toll of \$1.00 for every animal which passed over it. At the present time the trail is operated and maintained by the County, which collects the same toll.

It is claimed that the Kolb Brothers Studio at the head of the trail is on the right of way, which is alleged to be 40 feet in width. Even so the easement certainly cannot cover cases of this sort. A 40-foot right of way through the Indian Gardens would probably defeat the proposed plans made for that point.

Dave Rust built the tramway across the Colorado River four miles above the lower end of Bright Angel Trail. It now belongs to Ex-Governor Woolley of Salt Lake City and is known as the Woolley Tramway.

The trail up Bright Angel Creek on the north side is said to cross the channel eighty-three times. It is not well maintained and is used infrequently. Tourists who wish to cross to the north rim may do so by communication with Jim Owens, a guide who lives at the head of Bright Angel Creek, by telegrams to Kanab, Utah, or by signal fires near El Tovar. The manager of the Company's transportation department understands the smoke signals.

Parties leaving the rim in the morning lunch on the sand bars of the Colorado River. Lunch boxes are strewn over

the shore and in the mouth of Pipe Creek. In 1915 the Forest Service installed a metal incinerator, but it was carried away by floods. The Company has furnished hitching racks in Pipe Creek Box, but these have been washed away. There remain two temporary and unsightly toilets well up on the side of the Box. Some arrangement for permanent toilets, shelters, hitching racks and incinerators should be made. Toilets and racks should be placed further up Pipe Creek Canyon around the first bend so that they may be protected from the river floods.

During 1915 the Trail tolls amounted to over \$20,000, which greatly exceeded the cost of maintenance. The overseer has two laborers for maintenance, but the trail is in poor condition. It is not properly drained and is simply a ditch in many places. The location has been changed several times during the last ten years. It could doubtless be proven that the present location does not coincide with the original right of way.

There has been a great deal of litigation between the Santa Fe Railroad, Ralph Cameron and Coconino County as to the Trail. The County officials seem to have had the idea that if the trail were declared a public thoroughfare, the Company would immediately assume charge of it and continue the present toll charge.

One dollar per animal is entirely too high a toll charge. It is more than is actually needed for maintenance. On behalf of the traveling public an effort should be made to persuade Coconino County to declare this trail a public highway with the understanding that the Department of Agriculture will maintain it or provide for its maintenance on the ^{cooperation plan.} This would result in a cheaper transportation charge to the public and at the same time make it possible to put and keep it in first-class condition. Failing in this, the claims of Coconino County should ^{be} determined by Court proceedings, as there is considerable doubt as to the validity of the alleged easement.

Par. 51-A. Hermit Rim Road.

Hermit Rim Road is the most expensive development at Grand Canyon. It was built in 1913, by the Company, under permit. The Company states the road alone cost over \$185,000, and that the maintenance has cost from \$700 to \$1600 per year. It is eight miles long and probably should have cost much less, had the proper materials been used in the first place. It is a beautiful piece of road and has done more to open up the Canyon than any other improvement except the railroad itself.

At the present time there is a special regulation prohibiting the use of this drive by motor vehicles. This should be slightly amended. (See Par. 22.) It would be unsafe for automobiles to be driven over this road simultaneously with horses. On account of the drive being comparatively short, probably the time will never come when it will be the desire to operate automobiles to the exclusion of horse drawn carriages. At the present time the round trip is made in three hours, including stops. To substitute the use of automobiles would also detract from the present dignity and quietude of the trip. Even should it be possible there would remain the question of saddle horses along the road.

In November, 1916, a fire occurred at the head of the Hermit Creek Trail. At the time it was discovered it had reached the rim, was burning in the corrals, and was being swept east. A telephone message to Grand Canyon terminal brought a truck of water, chemical extinguishers and twelve men with tools. By following the two cutoffs and using the rim road for only a mile and a half between Hohave and Lima Points, the fire was reached in 20 minutes and extinguished before much damage was done. The Regulation proposed will not prevent similar emergency use in the future.

When the Hermit Rim Rest House was built supplies and material, together with the water for mixing the concrete, was hauled from the terminal by wagon. It has heretofore been necessary to haul by wagon all of the supplies and feed needed for Hermit Camp and for the repair of the road itself. Supply trucks should hereafter be allowed to use this road, via the cut-offs, between dark and sunrise. During these hours horses will not ordinarily be encountered. (See Par. 22.)

Par. 52-A. Grandview Road And Desert View Road.

The Grandview Road is maintained almost entirely by the Company. It has also built an additional fifteen miles to Desert View. It is proposed to extend this east to the Little Colorado River.

The annual maintenance of these two roads is given by the Company as \$1500, \$2500, and \$3500 from 1914 to 1916 inclusive. These figures give some idea of the amount to be assessed against liverymen. (See Par. 18)

Par. 53-A. Hermit Creek Trail.

The Hermit Creek Trail from Hermit Post to Hermit Camp (7½ miles) was constructed under permit by the Company in 1911. The Company claims this trail and Hermit Camp cost over \$14,000, plus \$2500 annual upkeep for the former. The mile and a half of trail from Hermit Camp to the Colorado River is now being built and will probably be finished by the Spring of 1917.

The Hermit trail is of better construction than the Bright Angel Trail, and it is maintained in much better condition. Two caretakers at \$50.00 per month are constantly employed. The Cathedral Stairs, which constitute the steepest portion of the trail, have been surfaced with cement so corrugated that there is no danger of animals slipping. This is an interesting example of concrete trail building.

There is an excellent rest house (built under permit) at Santa Maria Spring, where lunch is taken on the down trip. Plenty of water has been developed here. Necessary and clean toilets have been installed. The guides take a personal interest in burning lunch box refuse, so that the entire distance of the trail presents a clean and orderly appearance. The Company seems to take pride in keeping it in first class condition and employees boast of its superior points.

Par. 54-A. Tonto Trail.

The Tonto Trail is an Indian trail parallel with the

the Colorado River. It derives its name from the fact that it follows the Tonto sand strata. The west extremity connects with the Waldron Trail (which reaches the rim west of Hermit Creek Trail and is now not safe for travel.) The eastern extremity is difficult to determine. Whether or not it originally connected with Turner Trail east of Grand View, or entered Marble Canyon, is a question often discussed.

The original Tonto Trail was improved under permit by the Company from Hermit Camp to the Indian Gardens, during January and March of 1913. They claim to have also spent from \$500 to \$600 per year since then for upkeep. This portion of the Tonto, the Bright Angel Trail, and the Hermit Trail comprise the so-called Loop Trail trip, which is at present made by parties in two days by stopping over night at Hermit Camp. A branch from the Tonto Trail to the Plateau extending from near the Indian Gardens to Turtle Head Point is one of the most popular side trips from Bright Angel. It is now the intention of the Company to improve this trail and to construct some much needed toilets and shelters under its permit. The Forest Service has supplied an incinerator at this Point, and it is used to good advantage. The Company has under consideration the construction of shelters for stock. It is said that during the mid summer months, saddles get so hot while the riders are dismounted that they are uncomfortable to mount.

Par. 55-A. Rim Developments.

All of the existing Rim developments in front of El Tovar and the Bright Angel have been constructed by the Company.

PROSPECTIVE DEVELOPMENTS:

Par. 56-A. Community Buildings.

An excellent and appropriate school house has been constructed by the Grand Canyon school district.

An application has been received for permission to construct a church, and an area for this has been selected and is being held for that purpose until funds can be raised.

In the residential district a town park has been reserved within which a tennis court and band stand might well be located.

It is not likely that a regular Y. M. C. A. could be made to flourish at this point for many years to come. However, it is barely possible that a railroad Y. M. C. A. may be placed here by the Company, in which event it will doubtless be on the station grounds. If not, two of the lots in the residential district could well be used for this purpose.

If golf links are laid out, the probabilities are that they will be under the auspices of some club and probably some distance from the terminal. Accordingly, no provision is being made.

Grounds for a cemetery have been provided on the juniper hillside south of the railroad Y.

The Post Office is at present on the canceled Cape Horn claim and will doubtless remain there until a general store is built, at which time they might be operated in conjunction.

There is a limited agitation for using the old school house for a civic center or town hall. However, the new school house will better meet this need.

Commercial Projects

Par. 57-A. Indian Gardens.

The Indian Gardens constitute the more or less level stretches on the first mesa on the Bright Angel Trail at an elevation of 3,600 feet above sea level or 3268 feet below the rim at the head of the trail.

The water at this point has made it a desirable stopping point for trail parties to lunch. Due to mineral claims, however, there has been no authority to keep the place clean, and it is in a filthy and disgraceful condition. Piles of decayed remnants of lunch were found within a few yards of the trail at several points. Lunch boxes with the cards furnished by the Forest Service requesting care with refuse are found scattered from one end of the Gardens to the other.

One of the Coconino County Trail caretakers lives here. The surroundings about his living quarters are as filthy as other parts of the Garden. Tourists who pass up and down the trail probably often get the impression that this man is an employee of the Government.

There are four springs at the Gardens capable of supplying water for extensive hotel and living quarters. The surplus may some day be pumped to the top of the rim unless other arrangements are made.

It is the plan of the Company to develop these gardens as a stopping place for tourists who wish to remain in the Canyon over night or longer. A wax model has been made of the proposed development. It is the plan to have a number of individual cottages, some supplied with baths and others not. The plan is to fix a rate for the cheaper quarters so low as to be within reach of people of limited means. The prices of the more pretentious quarters are to be fixed high enough to help bear the costs of operation for the others. There is to be a central dining hall and a large lounging room with large fire place. Corrals for stock would be placed below.

It is the idea to have chickens and cows so as to furnish fresh eggs, milk and cream for the patrons. In order to do this there must be poultry pens and small pastures. For this purpose it is proposed to develop the lower Indian Gardens where there is not to exceed ten acres of land which may have value for these purposes. It cannot be hoped to grow enough feed for these cows; and, of course, the remainder must be packed down the trail.

The Company's landscape gardener desires to leave natural conditions undisturbed as much as possible. Cottages are to be built against or partially on top of boulders. Existing trees and shrubs are not to be disturbed. There is practically no wood supply, and the introduction of eucalyptus has been proposed.

The whole idea of developing the Indian Gardens is based upon the principle of making it appear, at least, as being independent within itself. The cliffs near by have cave houses and dugouts as living quarters for the Supai Indians, which tribe formerly inhabited this spot. These Indians will care for the garden spots. Fresh vegetables could be raised during at least eight months of the year. The effect should be pleasing.

The project is stupendous after one considers that building material must be packed from the top on mule back. This tract can hardly be put to any higher use than the one proposed. The

*Return of Spring 1914
L. A. ...*

*Stratigraphic
from west of Grand Canyon
This gives clear view
7-12*

*Stratigraphic
area cleared
7-12*

expenditure, which will be distributed over five to ten years, will probably be \$100,000.00. The mules which transport these supplies will be taxed the \$1.00 toll unless special concessions are made by the County authorities, or the present arrangement is permanently altered. (See Par. 49-A.)

It is planned to be able to take care of 60 guests per day by the end of next season, future developments to depend upon the demand.

The right of way along the Bright Angel trail is claimed to be 40 feet in width. (See Par. 50-A.) It practically ruins the upper Indian Gardens. It is essential that the trail be moved slightly in one or two instances. Even so, buildings will be within 20 feet of it.

Several years ago Kolb Brothers (See Par. 41-A) built a cabin at the lower end of the Upper Gardens. It was used for making of enlargements, since a free water supply was at hand. The building probably cost \$700.00 including packing the material. The County's employee who lives nearby states that it is used an average of three times a year. Mr. Emory Kolb claims to use it three times a month. The building has an abandoned appearance. There is no objection to the continued use of this building and site provided it is maintained in good order and the premises kept clean. However, any permit should be issued for an extremely small area surrounding the house and should clearly stipulate that it will not interfere with higher use.

Par. 58-A. House-keeping Cottages.

The Hotel management has decided that even the cheaper rates at the Bright Angel Hotel do not meet the requirements of what is considered to be the most desirable class of tourists and visitors. Educators, scientists and artists as a rule cannot afford to stop at El Tovar, and pride makes Bright Angel accommodations not quite satisfactory. It is for these that they now propose to undertake an entirely new development; namely, the construction of a group of artistic and plain but clean and light housekeeping cottages. These must be located so as to offer practically the same advantages as the hotels. It is the plan to have them in a group immediately west of the Bright Angel Hotel, south of the head of Bright Angel Trail. A location between the two hotels would not give the desired surroundings. This cottage idea, together with the Indian Gardens plan, is probably responsible for the Company's purchase of the Ralph Cameron mining claim interests.

The cottage lots are to be irregular in shape, separated by rustic stone walls two feet in height. Meandering paths are to make the connections. The central courtyard is to have a community fire place, open to the public, and to be supplied with fuel, Dutch ovens and other necessary utensils for camp cooking, corn roasts, or barbecues, the idea being to foster a community spirit. Detailed building plans have been prepared by Miss Colter and submitted.

Par. 59-A. General Store.

The Company operates a small store at the Hopi House, which is said to trade only with the Indians. A store of a similar nature is operated by Mr. Verkamp. There are rumors of another store said to be operated secretly by M. C. Metzger at his residence

(under permit as residence.) The officer in charge is seeking evidence on this. *Edward Jan 1917*

There is unquestionably a need for a general store. The officer in charge and a very considerable number of other residents are compelled to send to Williams for all supplies. The Company cannot operate a general store under its charter; and it is understood that while the manager of the El Tovar hotel is anxious to open a store, higher officials in the Company are opposed to this on the ground that it would be necessary for them to incorporate a separate company. The real objection of the Fred Harvey Company to this plan is probably that it could not, without becoming involved with the Interstate Commerce Commission, have its freight for a store hauled free of charge as at present, and to handle on a pay basis would complicate book-keeping. Campers who want milk or fresh meat cannot buy them, but are often furnished supplies by the hotel managers without charge. Likewise the Company cannot sell feed, and often feels it has to give away grain and hay, to meet real needs of campers. Several applications for stores have in the past been rejected on the ground that the National Monument would likely at an early date be placed under the jurisdiction of the Interior Department, as a National Park, and through a mistaken idea that present needs could be met by the present meagre agencies.

Now that the construction of housekeeping cottages is contemplated, one store at least with adequate service is absolutely necessary. Company officials would have an accurate check as to when prospective housekeepers would arrive and when they were leaving, which is a good argument for a company store. However, the Company would probably rather have cottagers patronize an independent store if operated on a first class and non-partisan basis.

The cottage community plans as presented call for a store in Zone 2. Under the proposed Zone plan the store will, however, have to be south of the tracks in Zone 4. *Sp. Dr. Temple plan*
Civil center TEW

The proposed regulations confer specific authority to control prices and service for any stores allowed and for further regulation, if necessary, in the interest of the public. (See Par. 12).

Par. 60-A. Desert View.

A permit was issued to the Company sometime ago for .95 of an acre at Desert View, on which tent houses have been constructed. The water system consists of a 1400-gallon cistern, which is filled by hauling water on motor trucks from the railroad terminal. These tent houses have been used by tourists who desired to spend the night at Desert View to witness sunset and sunrise on the painted desert. It was recently decided to enlarge the camp, and permit was issued for a total of 2.89 acres for existing and additional tent houses and outbuildings. The new buildings are to be located so that they cannot be seen from any other vantage point and are far enough from the rim so that no view can be obstructed. These temporary structures will probably give way to permanent ones in the future.

Par. 61-A. Livery Offices

Livery offices must of course be appropriately

designed. They should have individuality and so should not follow any set plan. A minimum per office cost should be about \$350.00. The loading blocks should be in the rear of the office, and a loop drive should connect them with the main road via the draw to the south.

Projects for Convenience of Public.

Par. 62-A. Rim Parks East and West of Terminal and at Verkamp's.

For policy on Rim Parks see Par. 16 and 19.

Proposed Park development at Verkamp's is covered by

Par. 40-A. Permit should issue.

West Park. The area between the Hermit Rim Road, the Hance cottage, and the Housekeeping cottage area has been informally applied for by the Company for the purpose of development as a Park. Miss Colter's plans indicate that this is to be parked and used for future extension of the cottage community. This should not be allowed, as the strip is very narrow and should never be used for any sort of buildings. It should be permanently retained in Zone 1.

The Company should be offered a free separate permit for the area for park purposes only, specifying free public use. Their plan to plant native shrubs is acceptable. A park in the ordinary sense of the word would of course be inappropriate.

The cost of this park, plus the adjacent rim development is estimated as \$5000.00. (See Par. 63-A.)

East Park. Eventually the rim east of the terminal should be parked. For the present the rim developments involved in the Yavapai Trail will suffice. (See Par. 64-A.)

Par. 63-A. Rim Developments.

Cottage Rim: The rim below the proposed cottages is not precipitous but consists of a series of benches. It would not be proper to allow the development of any portion of the rim so as to exclude the general public, as it has in the past been excluded on account of the Cameron livery corrals and buildings. Miss Colter's plans propose the development not only of the upper, but also of two of the lower benches by the construction of trails, seats and shelters, so built as not to be offensive to the eye from any vantage point above.

It was agreed that the front retaining walls of the housekeeping sites should not be placed nearer than 15 feet to the rim, and that the Company should construct a trail and retaining walls along the rim in front of these cottages and leave it unobstructed and open to the general public. In addition it was agreed that the Company develop lower levels as above described by which means the usable Rim Zone is greatly increased in width.

An estimate of the cost of the cottage area rim developments is \$5,000.00.

Park Rim: The plan is to have a public park west of the cottage area, and that the Forest Service should develop the rim in front of the Park. However, if funds are not available, the Company is willing to develop the entire rim as far west as the Hance

cottage. This would require an additional \$5,000.00 for rim and park. (See Par. 62-A.) From past experience it is very unlikely that Government funds will be available for this project.

Par. 64-A. Yavapai Trail.

One of the most important walks from the terminal is east to Yavapai Point. Apparently no work has ever been done on this trail, and pedestrians must stumble over rocks and boulders almost from one end of it to the other. \$300.00 would put the 1½ miles of trail in good condition. The Forest Service should do this if at all possible. (See par. 19.)

GENERAL ADMINISTRATIVE PROBLEMS.

Par. 65-A. Water Supply.

Grand Canyon Terminal has no natural water supply. The average consumption is five cars of 10,000 gallons each a day and during the rush season often runs as high as 100,000 gallons per day for weeks at a time. Until recently water was hauled from Del Rio, over 100 miles distant. The Railroad Company has now constructed a reservoir at Flagstaff under a ten year agreement with the City, which makes provision for ultimate acquisition by the municipality, and assures the Company of additional water for operating and other purposes. The water is valued at \$5.00 per tank f.o.b. cars at Flagstaff. The freight rate averages \$45.00 per tank from Flagstaff to the Grand Canyon, and water is sold there to private parties at \$50.00 per tank, or without profit except as to the freight business produced. The so-called "Independents" must depend upon the Company for their water except what little they may catch in cisterns from the roofs of their buildings or the limited amount of surface water caught in tanks below town for stock purposes. The Company could undoubtedly have complicated the furnishing of water to such an extent that the "Independents" would long ago have left this field, but did not.

Emory Kolb stated in his lecture (See Par. 41-A) that the Company charges them \$66.00 a tank for water. An investigation shows that water costs Kolb Brothers \$50.00 per tank car. In addition to this the water is pumped and delivered in Kolb's tank free of charge. Kolb's tank holds more than a car, and it costs them \$66.00 to have it filled. This statement to the public is distinctly misleading, since anyone would naturally suppose that what he meant was a tank car.

There is a project under way which may eventually result in water being piped from the San Francisco Mountains to Grand Canyon. The Company also has had under consideration pumping the water from Bright Angel Creek on the north side of the Colorado River. More recently it has considered the possibility of pumping water from Indian Gardens. The probabilities are that the water situation will be greatly simplified within a few years.

The principal problem now is one of conserving the

waste water for secondary use. Practically all of the overflow from the septic tank is used for washing carriages, stable floors and for irrigating the Company grounds. The Company now proposes to build a reservoir along the tracks below the septic tank for the purpose of catching the winter overflow. This could be used during the Spring for irrigating the grounds about the Bright Angel Hotel and the proposed cottages. The greater part of this tank will probably fall just south of the Monument boundary line, and should be constructed under permit rather than covered by easement.

The question of water for the public camp grounds has been a sore problem. Campers were at first allowed to get all the water they wanted at the Company garage. Petty thieving at the garage soon put a stop to this, and the campers were required to go to the power house where there was a faucet and nothing loose nearby. During the season of 1916 the tourist trade increased so that the average use for the season was about two barrels per day. Such use is a constant source of annoyance and reached a point of such financial importance that it was felt that a moderate charge should be made. The railway agent has charge of the water, and now the tourist must go to him, pay 25 cents for each day and get an order on the power house for water. This restriction has not proven satisfactory.

Water slot machines have been proposed, but the Company's agent says that they will not bother with them, since slot machines would probably be out of repair most of the time on account of slugs, washers, etc., that would doubtless be used to beat them.

The proper solution will be to install a faucet in the vicinity of the garage, where it can be observed by the man in charge, and equitable charges collected. The officer in charge should take this matter up.

At account book amount each month. Tex

Par. 66-A. Sanitation.

There has been complaint during the past several years because waste steam and laundry water from El Tovar were being piped over the rim, but these nuisances are now being eliminated. The pipes are being connected with the septic tank overflow.

The manure pile near the Cameron livery stables on the canceled Cape Horn Lode has probably been the most noticeable and really objectionable nuisance. The expected injunction against unpermitted occupancy and use of the Cape Horn lode will abate this nuisance.

The Company plans to move the section houses now located on the right of way, further south and out of sight on land covered by special use permit. (See Par. 33-A.) These buildings are to be connected by sewer with the septic tank.

Removed 1917 Tex

The Company maintains a large incinerator on the station grounds between El Tovar and Bright Angel Hotels where paper and light rubbish are burned daily. It is unsightly and the Company should be persuaded either to move it or reconstruct it.

The grounds surrounding the house built under permit by Cochise County for its representative and its corral are unsightly. County officials should be required to clean up these grounds.

The officer in charge is to be commended upon the

appearance of the camp grounds. It is practically impossible to keep them absolutely clean. Over 1,000 people used them during the past season. Fly traps should be installed. For details see Par. 66-A.

The Company stables are cleaned daily, manure being hauled away and floors actually washed. A garbage car is always found at the upper end of the Y and refuse from all parts of the settlement, with the exception of what is thrown into the incinerator, is dumped in this car and hauled away.

The Company septic tank is said to have cost \$20,000.00 and is considered sufficiently large to handle all that is piped to it at present. Practically no odor can be detected even on top of it. The charcoal should be changed annually; otherwise the tank is not effective.

The question of sanitation in connection with the use of this septic tank ^{water} is one that should not be overlooked. The water is absolutely colorless and odorless, said to be tasteless and is taken freely by all kinds of stock. At the present time the winter overflow goes into the tanks built by W. W. Bass further down the tracks. If the septic tank is properly taken care of, there is no danger connected with using this water for stock and secondary use. If the water is not safe for use, it might be a serious matter to use it for irrigation. Accordingly, samples should be examined by the State Health Department periodically. The officer in charge should see to this.

At Indian Gardens, the architect's plan is to install the Kaustine sanitation system. The Kaustine system is a combined chemical and agitation process, and under intelligent supervision should be better than septic tank or sewer disposal, since it would be difficult to handle the effluent of the latter systems.

The question of sewage disposal on the public camp grounds is an important one, and constant vigilance on the part of the officer in charge will be necessary. Modern toilets and sewer connections with the Company septic tank could probably be arranged but would be impracticable, both on account of waste of water and abuse of sewer toilets. Pit privies, carefully supervised, seem the only solution. (See Par. *Toilets built 1917 Tex*)

Par. 67-A. Public Safety.

Company automobiles are driven entirely too fast about the terminal. It would probably be impossible to enforce a speed limit. The example is bad, and to insure safety they should be required to drive more moderately.

Some livery outfits have driven their patrons off of the road to the edge of the rim itself. It seems to be a common practice for some liveries to drive teams on to some of the points. This is absolutely unsafe and should be prohibited.

There are practically no retaining walls or hand rails along the rim except near the hotels. Hand rails are not entirely in keeping with the rim, and it is suggested that a two-foot stone retaining wall be adopted as the standard safety device for rim improvements. Stone and concrete walks should be adopted as the standard rather than board walks. Plank walks are unsatisfactory for the rim.

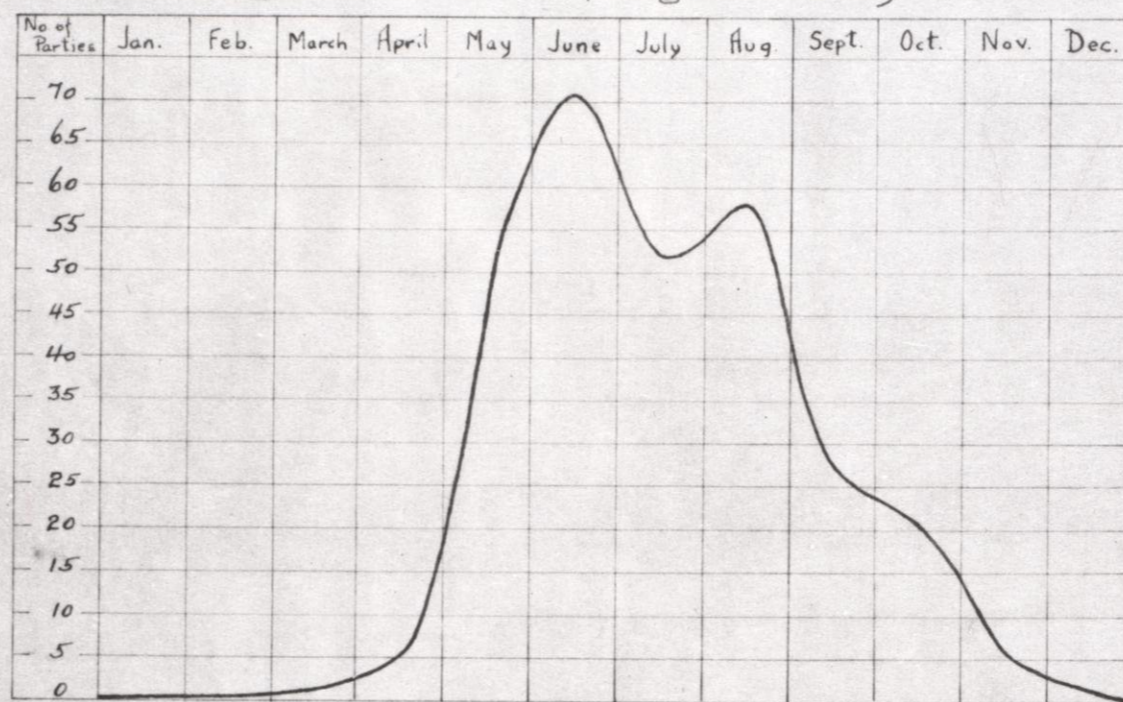
The rolling of stones over the rim seems to be a sport

23/A

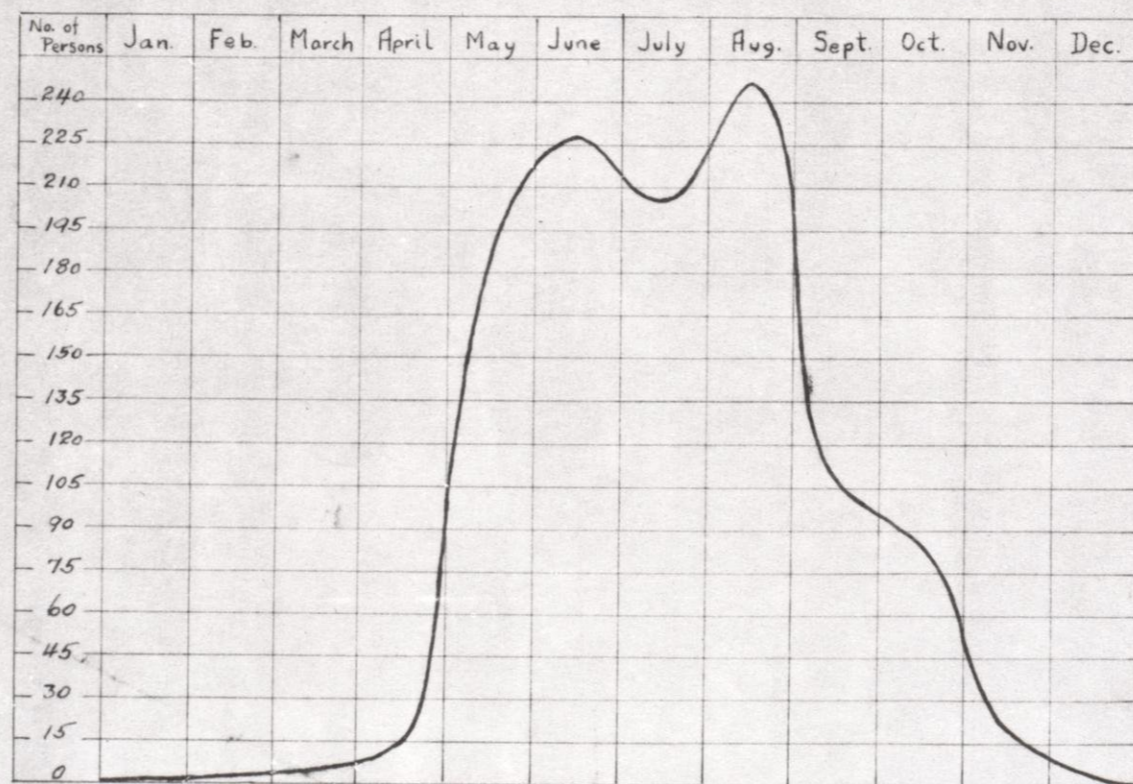
Par 68 -A

Public Camping at the Grand Canyon 1916

Curve Showing Number of Camping Parties by Months



Curve Showing Number of Campers by Months



generally indulged in. Occasional signs may be seen stating that this is forbidden. The signs are needed, but there has been no authority for enforcing them. This is provided for in the new regulations.

Par. 68-A. Public Camping.

The accompanying chart shows the number of campers and camping parties accommodated at the Public Camp Grounds during 1916. The data was compiled from the "Notice to Campers" or so-called Camping Permits.

See the preceding page 11 (2)

The object of these permits is to get instructive data into the hands of the camper. Their use should be continued. When reprinted, there should be added a clause prohibiting camping or hanging of blankets, clothing, hammocks, etc. at a less distance than 100 ft. from a public road.

Eighteen parties have camped on the public camp ground at one time. The present site may eventually be needed for structures of some sort. The number of parties will also probably increase. In such event the camp grounds may be extended to the east.

Although garbage cans and pits are furnished, it is difficult to keep the grounds clean. There is an inevitable accumulation of small trash which the Forest Service must clean up.

Fireplaces and rough tables similar to those recently placed at Cave Creek on the Chiricahua National Forest should be given a trial. It is believed that they will be very popular and actually prove an economy measure, since most debris would be completely consumed in the fireplace. (See General Instructions for Recreational Uses, Par. 22).

14 concrete fireplaces now in existence 1919

Bulletin boards after the style of those placed in the public camping grounds in Cave Creek should be constructed for posting of regulations, maximum livery rates, special signs, and the names of permitted business enterprises.

Accomplished

There is an excellent opportunity at the Grand Canyon public camping ground for disseminating knowledge and information regarding Forest Service work.

DETAILS OF ADMINISTRATIVE PLAN.

Par. 69-A. Administrative Force.

Heretofore the ranger stationed at Rowe Well Ranger Station, in addition to having charge of the Grand Canyon District or what is now the Grand Canyon National Monument unit, has had charge of the fire plan for the entire Grand Canyon Division. The three rangers on this Division depend upon telegraphic communication with their Supervisor at Williams. The telephones at the various stations are centralized at Grand Canyon terminal.

The Monument is now established as a separate administrative unit, with an officer in charge responsible to the District Forester. There should, however, be an exception made with respect to the fire plan. It would be unfortunate to set up an

additional fire organization. The officer in charge should continue to be fire-chief of the entire Division. *Accomplished*

The present force of one officer in charge and one Assistant is proper and necessary, and should be permanent. (Fire guards are not discussed here.)

Temporarily, however, the putting into effect of this plan will necessitate an extra amount of field work by the two permanent men, and at the same time a heavy load of office work. It should also be remembered that one man will have to be in the proposed office from early morning until late evenings, to answer inquiries from tourists (who begin to arrive between 6 and 7 A.M.) and during the fire season for telephone communication. It is therefore recommended that a clerk or other assistant be temporarily assigned during the entire field season of 1917.

Par. 70-A. Relation to Fire Plan.

The prevalent south winds mean that any fire which might occur in the woodland to the south endangers the forest along the rim. Top fires have occurred in this woodland, which indicates the degree of hazard. It should also be remembered that the traveling public is always a hazard. Reports for the past season show five fires to have originated from lightning, one from the railroad, two from unknown causes, and six from campers. The largest fire was two acres in area.

If any of the rim stands should be burned, the scenic value of the Canyon would be materially injured. This area should receive the most intensive patrol of any area in the southwest.

Now that roads are being opened up to the east, more attention should be paid to what is known as the Coconino Basin. Unless the present lookouts can be rearranged it will be necessary to provide at least one additional tower. *Sketch tower tower 1917 2 miles east of Grand View*

Handling Uses.

Par. 71-A. Issuance of Permits. List of existing Permits.

No term or irrevocable permits will be issued for any purpose.

The officer in charge will be responsible for seeing that no permit is recommended for any use or to any person not meeting the requirements of this plan. He should have authority to issue minor permits.

Present Uses	List of Existing Permits				Remarks
	Permittee	Case Date	Pres. Area	Pres. Fee	
Buildings	G.C.Ry.Co.	3/6/06	40.0	\$200.00	Formerly 76 A.
Station Grounds (rim dev.)	"	4/8/14	2.4	12.00	Four separate tracts
Garage	S.F.L.&I.Co.	4/8/14	1.4	10.00	Adding machine shop.
Store(ourios)	J.G.Verkamp	2/20/05	.25	20.00	Used as residence.
Livery Office	Bass, W.W.	10/11/15	.02	10.00	Temporary permit expired 4/29/16, which was only recently noticed. Permit not replaced, pending approval this plan.

*Added into Livery - 4/1/18
Residence tract #1. 4/1/18
" " 2 4/1/18*

Abandoned

List of Existing Permits (Cont.)

Present Uses	Permittees	Case Date	Pres. Area	Pres. Fee	Remarks
Livery office	Bass, W.W.	8/21/13	.057	10.00	Injunction by Cameron prevents enjoyment. <i>Closed TEN</i>
Stage Station	Bass, W. W.	10/9/09	4.0	10.00	Residence and barns.
School House	School Dist. #4	2/3/16	1.03	---	Company furnishes free light, heat and water.
Board Walk	School Dist. #4	8/23/16	344'	---	Constructed
Water & Heat line	School Dist. #4	9/18/16	285'	---	Not constructed <i>Completed 1917 TEN</i>
Church	M.E. Church	4/21/16	.34	---	No construction <i>Closed TEN</i>
Residence	Metzger, M.C.	3/1/16	.40	10.00	Tent house - poor location <i>Closed + removed 4/17/16 TEN</i>
Residence	Hance, John	9/24/15	.06	---	Expiration 4/1/16. Passed unnoticed. Require removal of outhouses on issuance new one. <i>To be torn down. Comms. decided. TEN</i>
Residence	Coconino Co.	1/15/15	.41	---	Residence and office.
Residence	Blower Arthur	9/15/15	.5	10.00	Tent house - poor location. <i>Closed + removed 4/17/16 TEN</i>
Pasture	Lockridge Wm.	4/1/16	.5	2.00	Combine permit to Coconino County. <i>Done TEN</i>
Roads, Trails, Buildings, Landing platforms.	S.F.L.&I. Co.	5/3/09	50.0	40.00	Includes Rim Road, Hermit Trail, hitch racks, landing platforms, Hermit Rest House, Hermit Camp, Hermit Creek pipe line.
Toilets	S.F.L.&I. Co.	4/13/14	.01	---	
Shelter	"	1/2/15	.014	---	
Telephone Line	"	3/30/11	4.5 mi.	---	Used by guards
"	"	5/21/13	"	---	" " "
Pasture	"	9/22/08	1240A.	49.60	Haul water and hay to this.
Pasture	"	11/14/08	40	4.00	
Pasture	Rowe, Sanford	7/30/14	245	9.80	
Cabin	Big Jim	11/1/13	.3	---	Not a citizen (Indian)
Road House	Bass, W. W.	2/26/04	5.0	10.00	Used little <i>before filed on survey claim. 25 off back area TEN</i>
Ditches	Metzger, M.C.	8/24/14	2 p.	---	
Stock tanks	Moore, Sam	6/18/14	.5	---	Two tanks
Stock tank	Bass, W. W.	4/29/09	2.5	---	
Stock tank	Indian Agent	4/1/14	1.0	---	G-5 Stock.
"	"	4/2/14	1.0	---	" "
Drift fence #1, Havasupai Indians	"	3/4/13	6.5 m.	---	" "
Drift fence #2, "	"	3/5/13	3 m.	---	" "
Drift fence	Hearst, W.R.	1/5/15	.25 m.	---	
Pasture	"	7/3/15	322 a.	16.10	Better grass than S. F. L. & I. Co. pasture
Sewer Line	Canyon Copper Co.	9/12/03	---	---	Not used <i>Closed TEN</i>
Agricultural	Berry, P.D.	3/2/09	7.5	3.75	<i>Transferred to W.R. Hearst TEN</i>
Pasture	Berry, R. J.	10/24/14			<i>Relaid on Tusayan TEN</i>
Rest House	S.F.L.&I.	10/4/16	2.89	10.00	Desert View
Roads, Trails	Tusayan M. & S. Co.	6/18/15			<i>Closed TEN</i>
Aerial Tranway	Tusayan M. & S. Co.	6/18/15		50.00	<i>Closed TEN</i>
Telephone connection	Reed, Geo.	7/24/13	---	---	Used by guards
Telephone connection	Kirach, Chas.	7/24/13	---	---	" " "
Telephone connection	Buggeln, Martin	"	---	---	" " "
Telephone connection	Berry, P.D.	"	---	---	" " "

Par. 72-A. Revision of Present Charges and Areas.

Charges for all existing permits are based more or less on acreage. This is fundamentally unsound, the more so since the acreage now covered is in many cases ill-adjusted to the permittee's present need and use of the ground. Moreover, a flat acreage charge is not in accordance with Reg. L-33 (Manual page 46-L) and the principle laid down in page 50-L of the Manual.

Under the plan, the officer in charge will be responsible for recommending the adjustment as rapidly as necessary, practicable, or desirable of all current permits, and reporting or acting on all future applications, in accordance with the following principles. The urgency of adjustment will be decided for each special case on its merits.

(a) Charges to be based (See (c)) on estimated ground rental value of area, considering purposes for which it is to be used, and guided in a general way by the schedule of charges in Reg. L-33.

(b) Areas to be based on actual present need. No areas to be held under permit for proposed future development. Areas now so held to be cut down to present use.

(c) All uses to be classed, as to charge, into one of four classes.

1. Commercial Uses. i.e., operated primarily for profit, whether profit accrues from the use itself or in an indirect way to the permittee or affiliated parties. Charge for commercial permits to be a fair estimated rental value, bearing in mind, however, that moderate charges to the public by the permittee are more desirable than high uses receipts. This class includes all cases involving a charge, or selling goods to the public.

2. Residence. \$5.00 to \$25.00, as prescribed, in Reg. L-33. Lots reserved for residences to be priced in advance as far as practicable.

3. Public Uses. This includes practically all other uses. All projects theoretically devolving upon the Government, such as roads, trails, and rim developments, to be in this class, also all community buildings. No charge for uses of this class.

4. Combination Uses, involving a combination of two or more of the above classes to be charged for at an equitable modified rate.

Special Cases: The Hance residence should continue free of charge, but his outbuildings should be moved to better locations, and premises cleaned up.

Information and Publicity Work.

Par. 73-A. Information Office.

The officer in charge has at present a 10' x 12' tent house which serves as an office. It is labeled "Temporary Office of the United States Forest Service". Funds have not been available for a more permanent structure, although the needs have been appreciated for several years.

A combined office, information bureau and permanent exhibit room is absolutely essential. No other office on Government owned or controlled land should be permitted to use the sign "Information Bureau". In the office should be posted the schedule of trips and the regular charges of each permittee. Information regarding each should be given without bias or favoritism. This can be accomplished

best by posting a complete system of bulletins. The fact that the various enterprises have permits should establish their reliability.

Advertising literature of livery men and curio dealers should not be dispensed from this office.

A proper sign, located at a point to attract the attention of railway passengers, should show the names of all who hold permits for the transaction of business, and give notice that authorized schedules and rates may be seen at the Information Bureau.

The information office should be supplied with an up to date fire map, indicating the operation of the triangulation fire detection system. Departmental and Forest Service literature on the subjects of forestry and allied subjects should be available for distribution.

The Office building should be of logs and have at least three rooms, one for the information bureau, one to serve as an office, and another for a permanent Forest Service exhibit.

The most appropriate site would be south of the Verkamp store facing the El Tovar hotel. For estimates see Par. 20.

Par. 74-A. Hopi Tower.

4500 persons have registered at Hopi Tower since the opening of the 1914 season. The register contains many flattering comments on the work of the Service. The fact that this is a sight-seeing point, as well as a lookout tower, points to the selection of a lookout man who in addition to knowing the territory and understanding the detection system, will have the ability, personality, and presence to meet the public and explain his duties and workings of the Forest Service.

Par. 75-A. Folder Map.

A Folder Map or Official Guide prepared in 1915 but never published should by all means be brought up to date, published and distributed from the Information Office. It shows more valuable information than any other suggested plan. It would probably be taken home by most tourists and thus would serve as a very valuable medium for distributing information.

Par. 76-A. Possibilities of Wireless Telephony as an Educational Measure.

There is a demand for telephone communication with the north rim. Tourists who wish to take the cross-canyon trip are required to telegraph Kanab or rely upon signal fires. (See Par. 50-A.) The County of Coconino should be interested in such a line.

A line from Grand Canyon Station to the River and up Bright Angel Creek would cost a large sum of money. It is understood that a better route might be found via Bass Camp-Havasupai Indian Reservation-Shinumo Creek-Moab to Canyon-Ryan Ranger Station on the Kaibab Forest, from which point there is telephone connection to Kanab. It would probably cost \$500.00 per mile to build either of these lines. The question of maintenance would also be troublesome and expensive.

In view of the proven practicability of wireless telephony it is urgently recommended for the Grand Canyon. For estimates see Par. 20. The operation of the one located at the terminal would be inexpensive, the Company having offered to furnish the power.

*Equipment completely installed in Grand Canyon Office 1918
with side needs new motor generator + new engine from base camp
TEN*

Par. 77-A. Sign System.

Portals are inadvisable at Grand Canyon.

On account of the diverse activities involving signs there will be a tendency, unless foreseen and prevented, toward an undue multiplicity of prominent signs.

The officer in charge will be responsible for recommending construction of needed signs. In doing so he should be guided by the following principles:

(a) A large number of small inconspicuous metal-framed signs should be used instead of a fewer number of large conspicuous signs, wherever practicable. For instance, fire and sanitation warnings on the public camp grounds should consist of a small sign at every camp site instead of one or two large billboard-like signboards.

(b) Where small signs are not practicable, standard green on ivory wooden signs should be used. Road and Trail directions, "Public Camp Grounds", etc. fall in this class.

Living Quarters

Par. 78-A. Need for New Quarters.

An officer in charge and his assistant now reside at the Howe Well Ranger Station three miles from Grand Canyon Station and entirely off the National Monument. The water supply is rented from Mr. Howe, who has mining claims nearby, of which 65 acres are now going to patent. The pasture is practically worthless, and when the ranger leaves his station on a trip requiring his absence for more than a day it is necessary to take horses which he is not using to the Company corrals at the railroad terminal. This is extremely expensive, both in time and money.

For the Ranger to economically and effectively administer the Grand Canyon it is absolutely essential that he live near his work.

Par. 79-A. Plans for New Quarters.

An area has been selected near the rim on a ridge east of the terminal (see map.) It would be useless to build a pasture, since there is practically no grass. However, large corrals and stables should be provided.

The location and design of the building is important. A suitable house cannot possibly be built within the present \$650.00 maximum. At least \$3,000.00 will be required for the house alone and probably \$1,500.00 for barn, outbuildings, fences, heating system, pipe lines, telephone, water and light connections. All the buildings should be of logs. Miss Mary E. J. Colter has promised to prepare plans if basic data are furnished her. If it is found that there is not sufficient pressure for having running water at this point it might be hauled in barrels up the principal draw which is an excellent location for a road and which may be cleared in fairly good condition at an extremely low cost. A cistern to catch the drainage from the roof would, however, supply enough water except for strictly personal needs. Electric light could easily be secured

*Sign plan completed 1918
TEN*

direct from the power house.

MISCELLANEOUS.

Par. 80-A. Game and Fish Plan.

The Grand Canyon National Game Refuge (Act. of June 29, 1906, 34 Stat. 607) covers the Grand Canyon National Monument as well as additional portions of the Tusayan and Kaibab Forests.

The refuge is estimated to contain 10,000 black-tail deer (census by District -4) and about 600 head of mountain sheep (Hornaday 600, Sheldon 1,000, Way 600.) The importance and value of this herd of sheep can hardly be overestimated, since it is the largest remaining herd of mountain sheep in the United States, not excepting even the Yellowstone Herd. Most of the sheep and deer are on the northern side of the Colorado River.

There is a herd of about 75 antelope located east and south of Rowe Well which is also very important, since at some future time they can possibly be made to range around the terminal and afford an interesting sight for visitors.

Two Jaguars or "Mexican Tigers" were killed near Bass Camp two years ago. The Canyon is infested with lions in places.

The Colorado River contains the species of large salmon.

Hermit Creek and Indian Garden Creek should be stocked with rainbow trout. On account of their small size it will be necessary to prohibit fishing. Under the proposed Federal Game Refuge bill, this will be possible under the clause authorizing the regulation of fishing.

Indian Gardens should be stocked with quail and pheasants. While the Act of June 29, 1906 does not mention birds, the public would probably consider them as included within the terms of the game refuge. They can also be covered by a local closed season under the new Arizona Law.

It has been proposed to stock the region around the terminal with elk, but it is probable that the lack of running water will prevent the success of this plan.

A herd of wild burros, said to be rapidly increasing, is proving a nuisance to trail parties and may also be threatening the food supply of the mountain sheep. Under the state law it is unlawful for any individual to dispose of these. However, the State Sanitary Board (letter of February 21, 1916) has stated that it will sustain no objections to their extermination. It is possible that tourists might criticize the killing of these wild burros. Some prospectors also seem to use them as pack animals when needed. The killing must therefore be handled carefully, but it is nevertheless advisable. The officer in charge should definitely determine the extent to which they are a nuisance to tourists and a menace to the mountain sheep, and if either is found to be true in any degree, the extermination of these burros should again be taken up with the Biological Survey.

The Game Refuge has so far been a refuge principally in name. The Supai Indians regularly kill deer, and they have possibly killed some sheep also. In the future it should be considered that the value of the game in this refuge is so great

as to merit a special effort on the part of the officer in charge to prevent all hunting.

Par. 81-A. Suggested Revision of Place Names.

Supai Temple reported the Simms of man who has taken interest in changed names. Unable to inform how far below good.

Mr. Simms, who is the active head of the Field Museum of Chicago has complained of the naming of the various features of the Grand Canyon. The following are taken from the map:

- | | |
|------------------|--------------------|
| Zoroaster Temple | Queen Isis |
| Juno Temple | Naji Point |
| Freya Castle | Wotan's Throne |
| Thor Temple | Old Point |
| Lome Point | Brahma Temple |
| Buddha Temple | Shiva Temple |
| Osiris Temple | Tower of Ra |
| Confucius Temple | Holy Grail Temple |
| Masonic Temple | Mencius Temple |
| Galahad Point | King Arthur Castle |
| Ruby Canyon | Turquoise Canyon |
| Diamond Canyon | Sapphire Canyon |
| Topaz Canyon | Slate Canyon |

Clerks at the hotel desks state that almost daily they are questioned as to these names and asked, for instance: "Are diamonds really found in Diamond Canyon?"

It is suggested that these names are in bad taste. They should be referred to the Geographic Board with the recommendation that the original Indian names be restored. The officer in charge should collect data as to these Indian names.

1300 rainbow trout planted in Hermit Creek August 1918 T.E.

L
Uses - Tusayan,
Grand Canyon Working Plan.

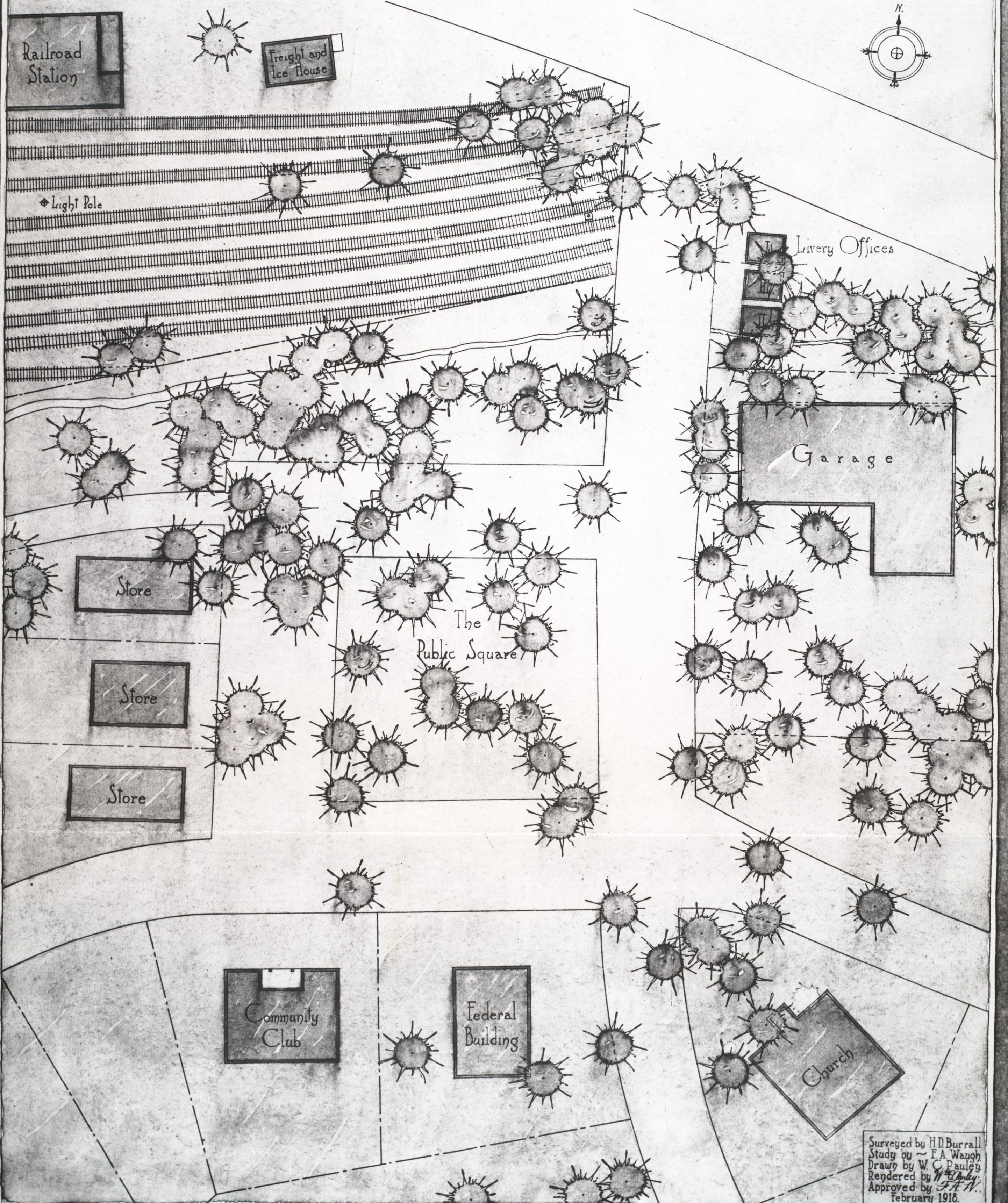
THE CIVIC CENTER GRAND CANYON ~ ARIZONA

UNITED STATES FOREST SERVICE

By Frank A. Waugh Landscape Engineer
Collaborator

20 10 0 5 10 15 20 30 40 60 80 100

To the Scale of Thirty Feet to the Inch



Surveyed by H.D. Burrall
Study by F.A. Waugh
Drawn by W.C. Pauley
Rendered by W.C. Pauley
Approved by F.A. Waugh
February 1918.

SOUTH RIM GRAND CANYON ARIZONA

HOPI to YAVAPAI POINTS
PART I
L.C. Way, Forest Ranger Sept. 1913.

Revised to additions Feb. 1915
May 1915

LEGEND

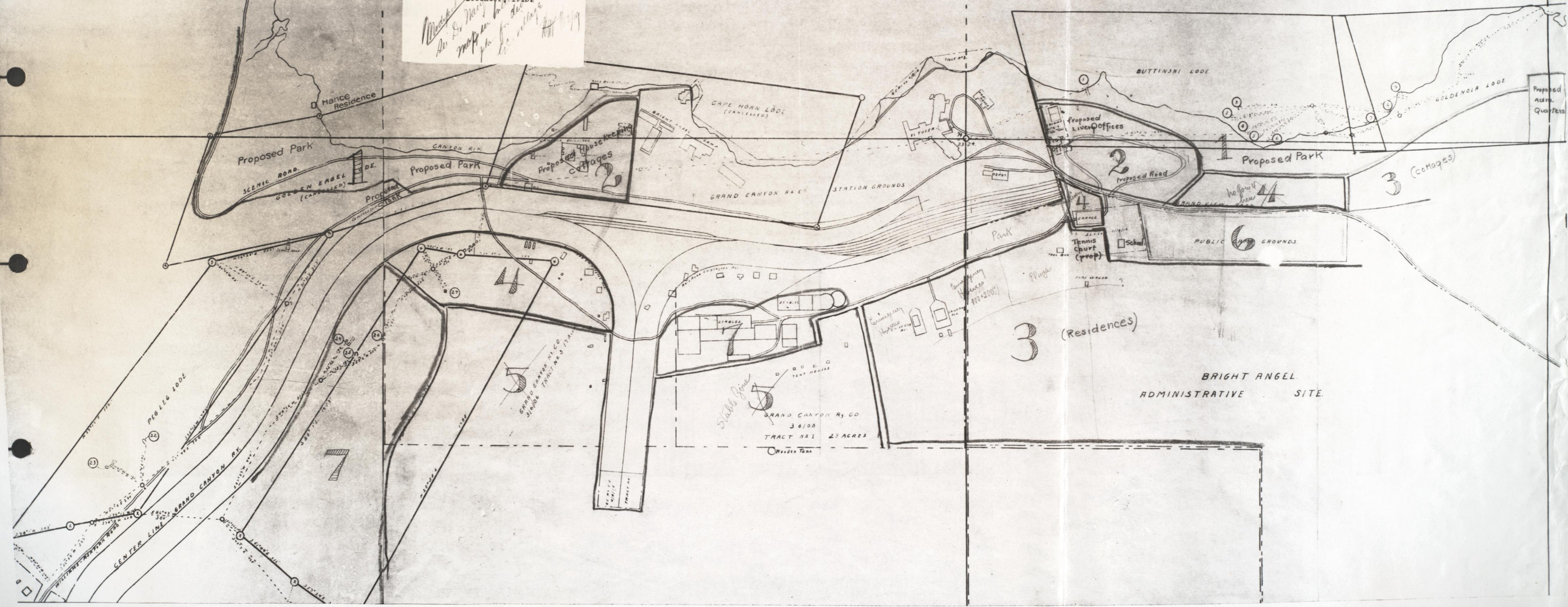
- ⊗ Stone monument-identified
- × Stone monument-not identified
- C Cuts
- === Tunnels
- ▭ Trench
- Shafts
- Enclosing no. - Mine workings.

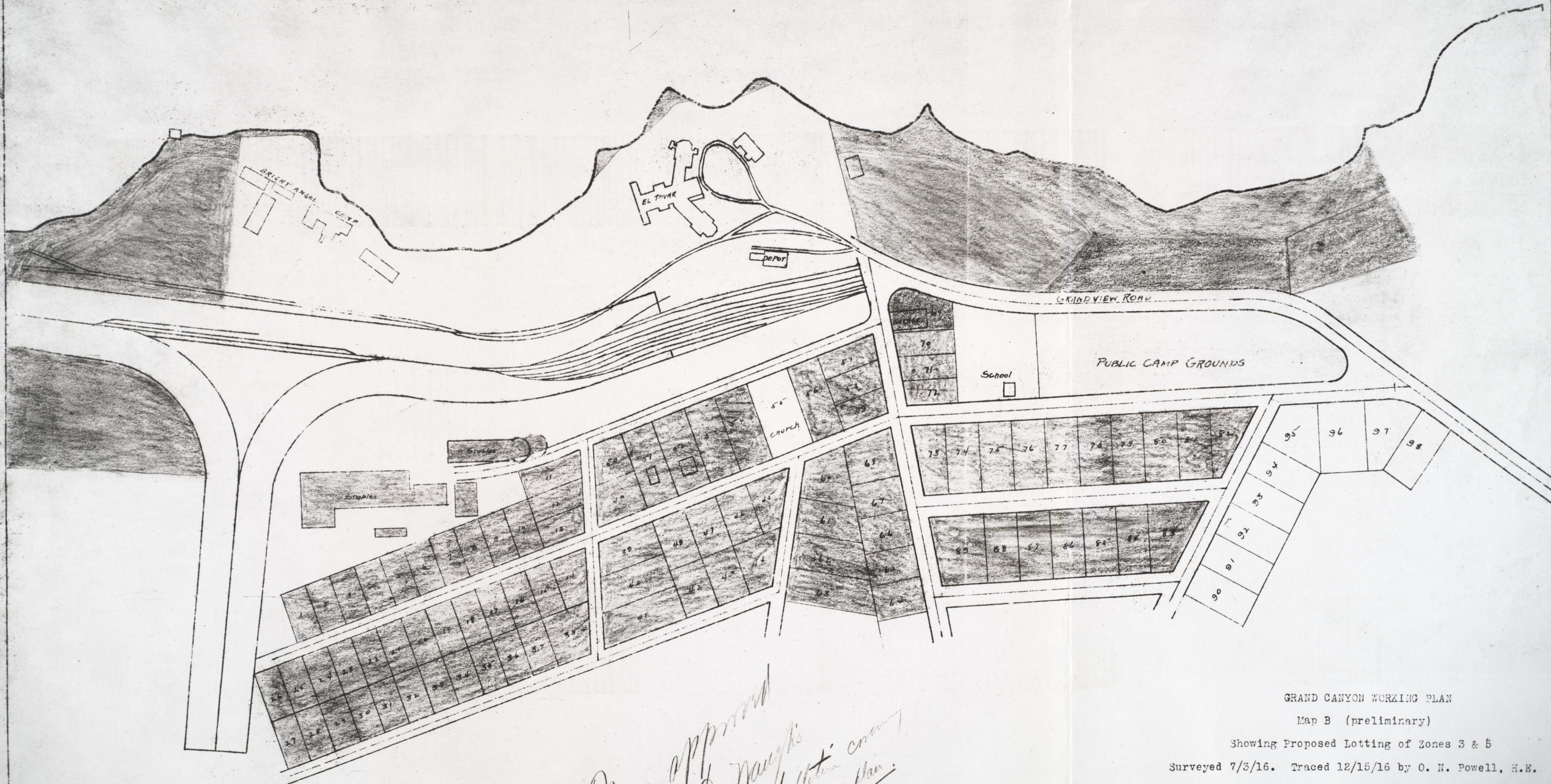
Map A (preliminary)
GRAND CANYON WORKING PLAN

LEGEND (see Par. 9)

1. Rim Zone
2. Accommodation Zone
3. Residence Zone
4. Commercial Zone
5. Seasonal Camp Zone
6. Public Camp Grounds
7. Stables Zone

December, 1916.
*Map by L.C. Way
 for the
 proposed
 working plan
 for the
 Grand Canyon
 National Monument
 1913-1916*





*Plan approved
 all maps in bulletin cover
 G.C. village plan
 1/13/19*

GRAND CANYON WORKING PLAN
 Map B (preliminary)
 Showing Proposed Lotting of Zones 3 & 5
 Surveyed 7/3/16. Traced 12/15/16 by O. N. Powell, H.E.
 Scale 1" = 200'

SUPPLEMENTAL PLAN
FOR DEVELOPMENT OF THE
VILLAGE OF GRAND CANYON

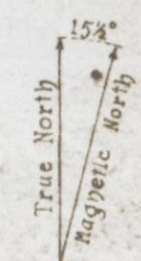
by
Frank A. Waugh
Collaborator

1918

GENERAL PLAN GRAND CANYON ~ ARIZONA

UNITED STATES DEPARTMENT OF AGRICULTURE ~ FOREST SERVICE

By Frank A Waugh, Landscape Engineer
Collaborator.



200 100 0 100 200 400 600
To the Scale of Two Hundred Feet to the Inch



Surveyed by H.D. Burrill
Study by Frank A. Waugh
Drawn by W.C. Pauley
Rendered by W.C. Pauley
Approved by J.A. [Signature]
February 1918

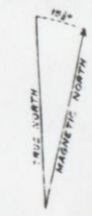
WORKING PLAN MAP
GRAND CANYON
 TUSAYAN NAT. FOR.
 RIM AREA

Surveyed by H.D. Burrall Aug. 1917
 Scale
 Contour Interval Five Feet



LEGEND

- | | |
|--------------------------------|--|
| □ TENT HOUSE | --- TRAIL |
| ▢ SHED | == ROAD |
| ⊠ TOILET | --- SIDE WALK |
| ⊡ RESIDENCE | --- RAIL WING |
| ⊕ FIRE PLUG | --- STONE WALL & BUTT |
| ⊖ FIRE PLUG HOSE REEL TOGETHER | ⊙ TELEPHONE LIGHT OR POWER POLE |
| ⊙ MANHOLE | ⊙ STAIRWAY |
| ⊙ BLACK JACK | ⊙ MONUMENT |
| ⊙ YELLOW PINE | ⊙ WIND |
| ⊙ JUNIPER | ⊙ P. S. FIREPLACE |
| ⊙ PINON | --- ORIGINAL STA. GROUNDS MAR. 22-1908 U.S. R.V. CO. |
| ⊙ SIGN | --- ADDITIONAL STA. GROUNDS APR. 18-1908 |
| --- FENCE ON STONE WALL | --- GRAVEL USE PERMIT AUG. 22-1918 |
| --- FENCE | --- CONCRETE PARAPET |
| --- RAILING | ⊙ RIM |
| --- MINERAL CLAIMS | ⊙ WATER TANK |
| | --- SPECIAL USES |



WORKING PLAN MAP
GRAND CANYON
 TUSAYAN NAT. FOR.
 RIM AREA

Surveyed by H.D. Burrall Aug. 1917

Scale

Contour Interval Five Feet



LEGEND

- | | |
|--|--|
| <ul style="list-style-type: none"> □ TENT □ TENT HOUSE ○ SIZES □ TOILET □ RESIDENCE ⊕ FIRE PLUG ⊕ FIRE PLUG HOSE REEL TOGETHER ○ BUNKER ○ BLACK JACK ○ YELLOW PINE ○ PINON — SIGN — FENCE ON STONE WALL — FENCE — RAILING — MINERAL CLAIMS | <ul style="list-style-type: none"> — TRAIL — ROAD — SIDE WALK — RAIL ROAD — STONE WALL & RIVER — TELEPHONE LIGHT OR POWER POLE — STAIRWAY — MINERAL MONUMENT — F.S. FIREPLACE — ORIGINAL STA. GROUND MAP 22-1104 U.S. G. S. — ADDITIONAL STA. GROUND MAP 22-1104 U.S. G. S. — SPECIAL USE PERMIT 2112-22-1104 — CONCRETE PARAPET — RIM — WATER TANK — SPECIAL USES |
|--|--|

T. 31 NORTH
 23 24
 26 25
 R. 2 EAST G. 6 S
 MER

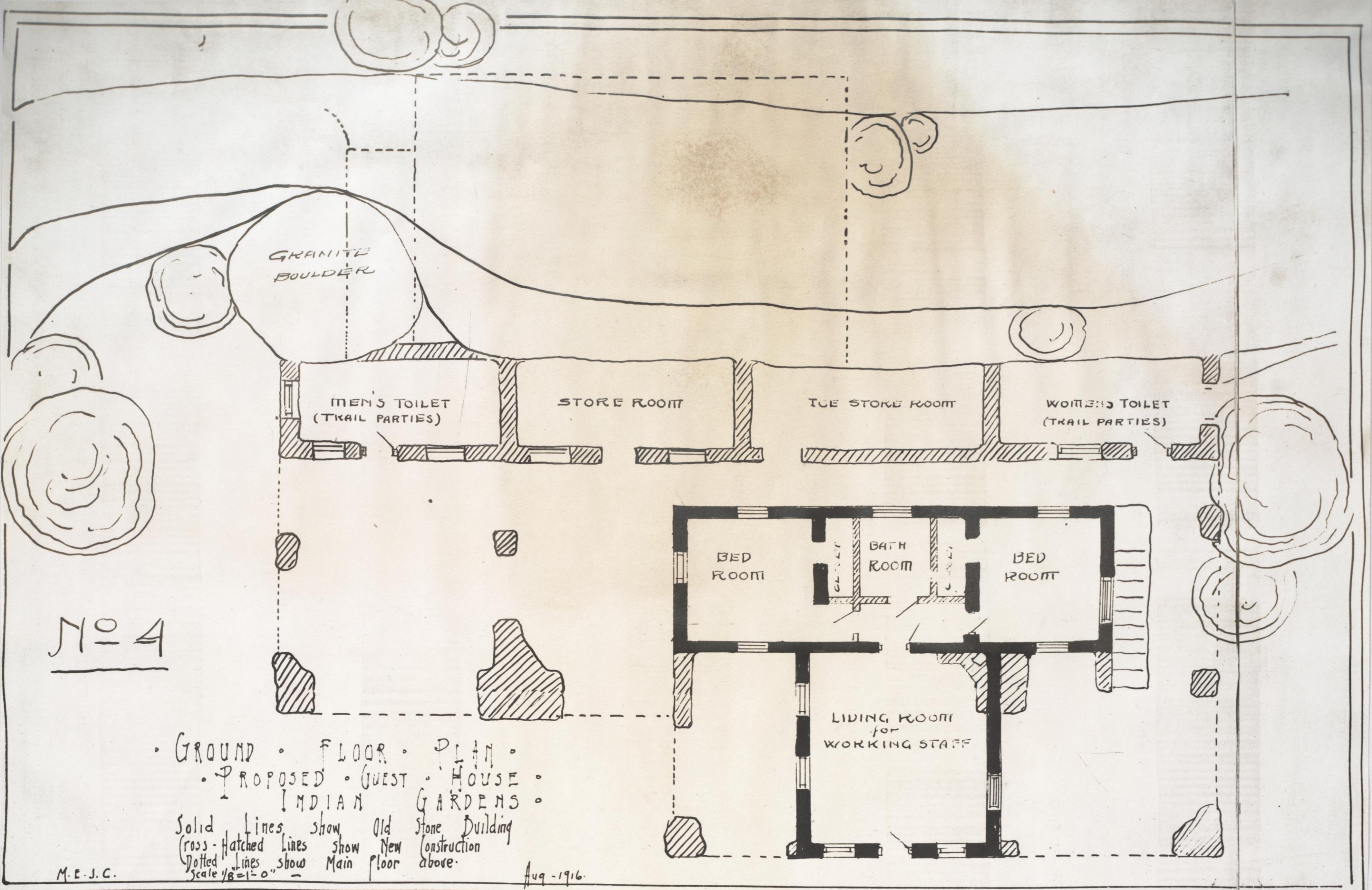
PLANS AND SKETCHES

PROPOSED DEVELOPMENTS

RIM AND INDIAN GARDENS

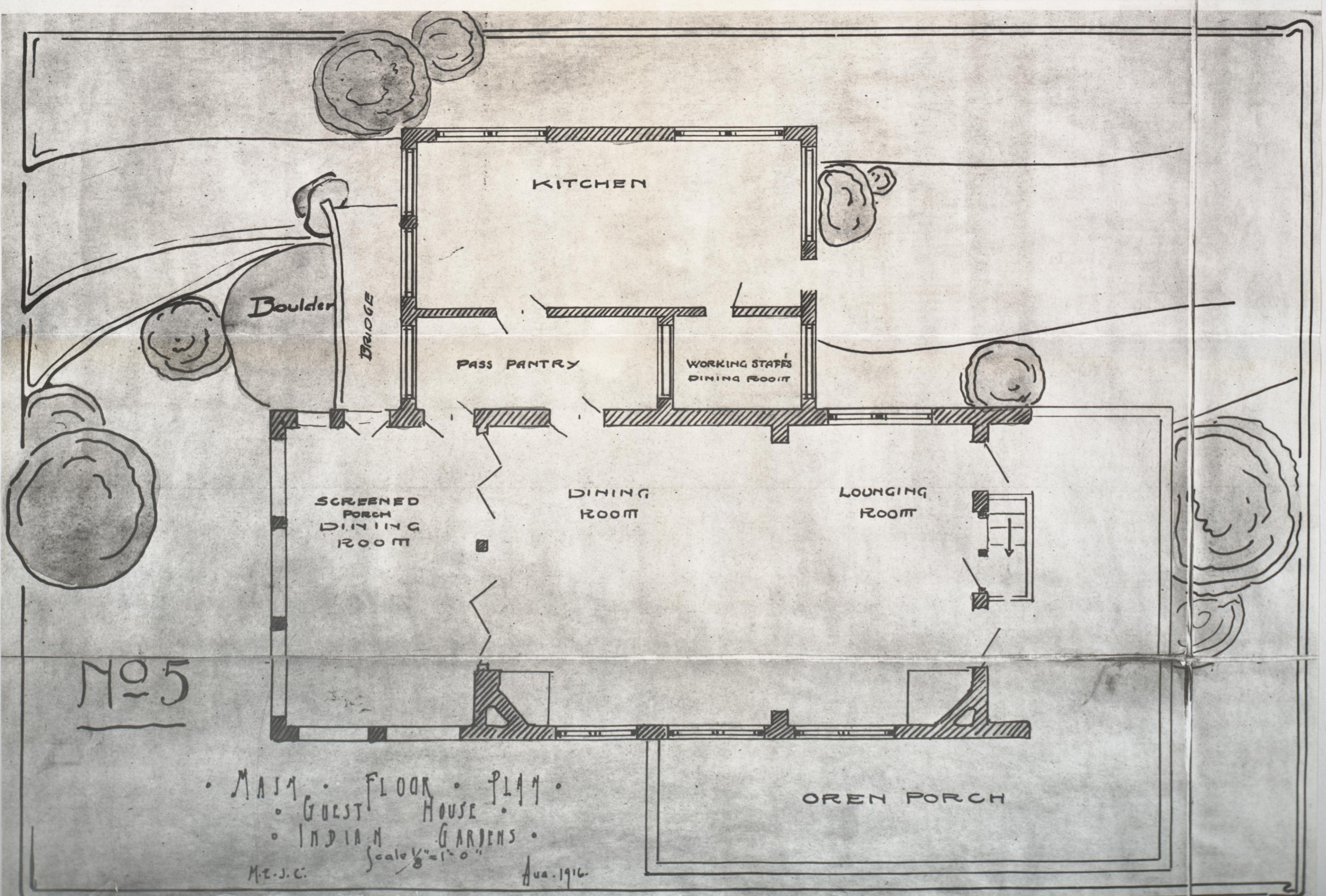
BY

SANTA FE LAND AND IMPROVEMENT CO.



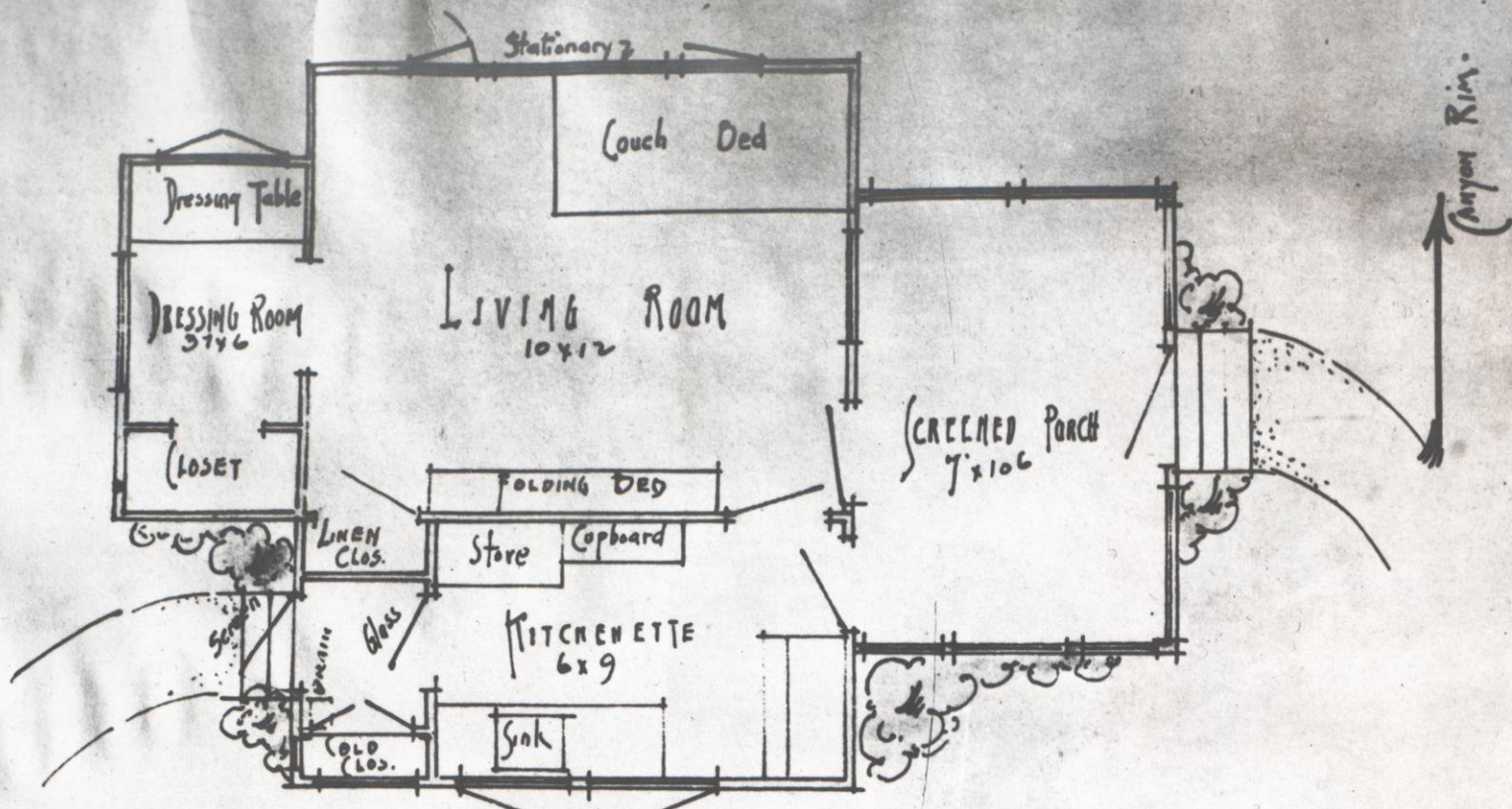
No 4

• GROUND FLOOR PLAN •
 • PROPOSED GUEST HOUSE •
 • INDIAN GARDENS •
 Solid Lines show Old Stone Building
 Cross-hatched Lines show New Construction
 Dotted Lines show Main floor above.
 M.E.J.C. Scale 1/8" = 1'-0" Aug. 1916

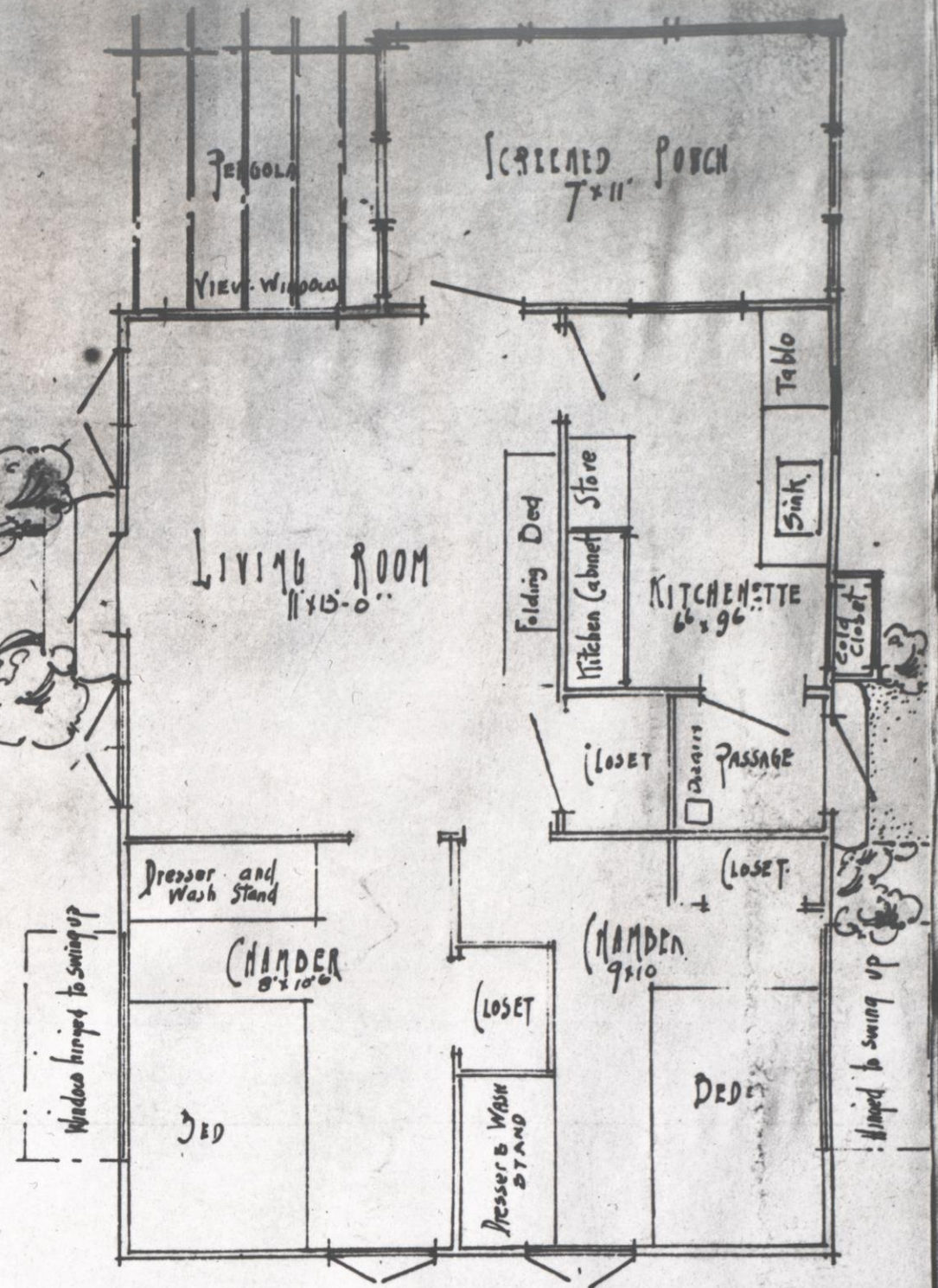


No 5

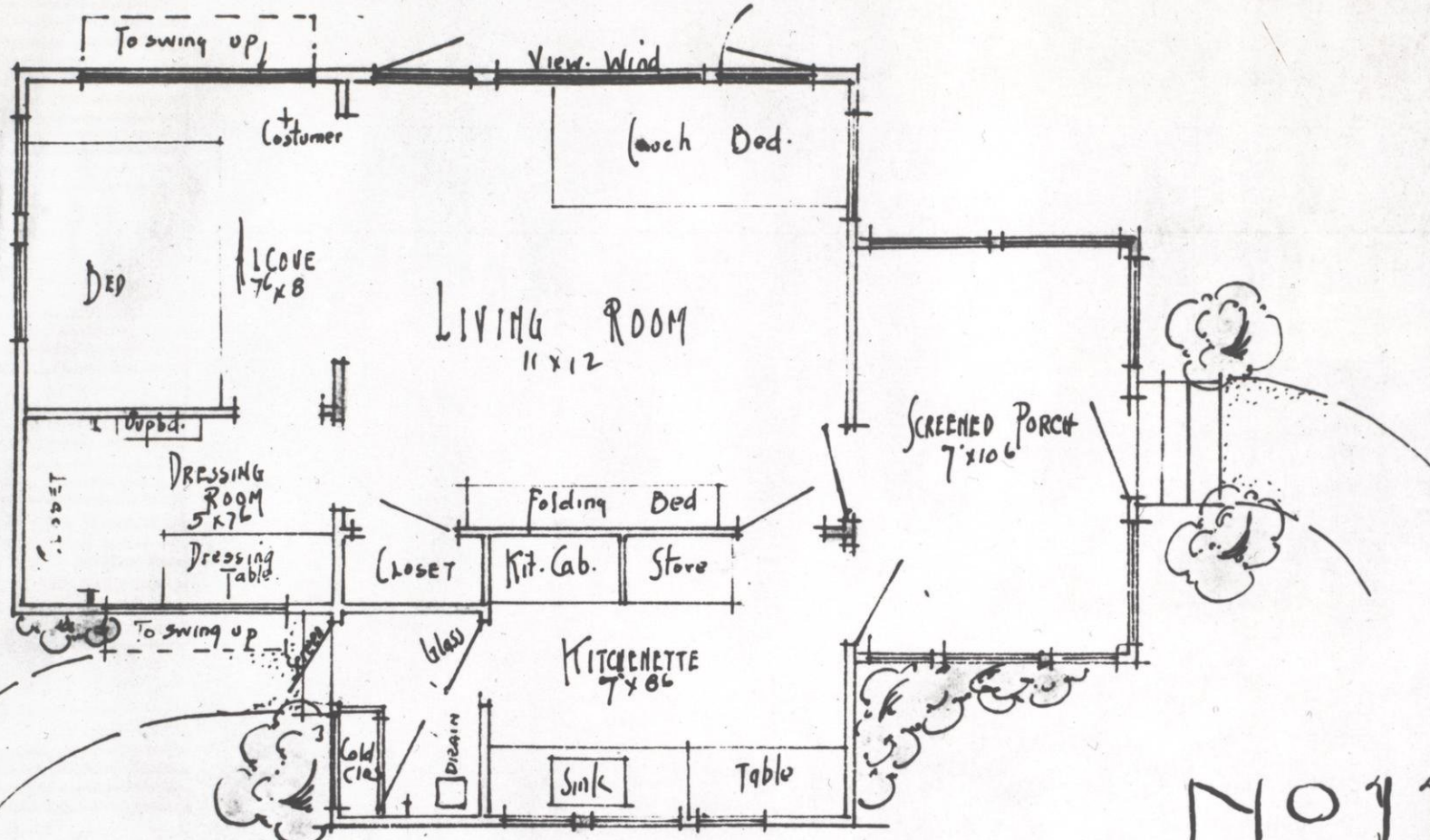
• MAIN FLOOR PLAN •
 • GUEST HOUSE •
 • INDIAN GARDENS •
 M.E.J.C. Scale 1/8" = 1'-0" Aug. 1916



"TYPE A"
• ACCOMODATING TWO OR THREE PERSONS •



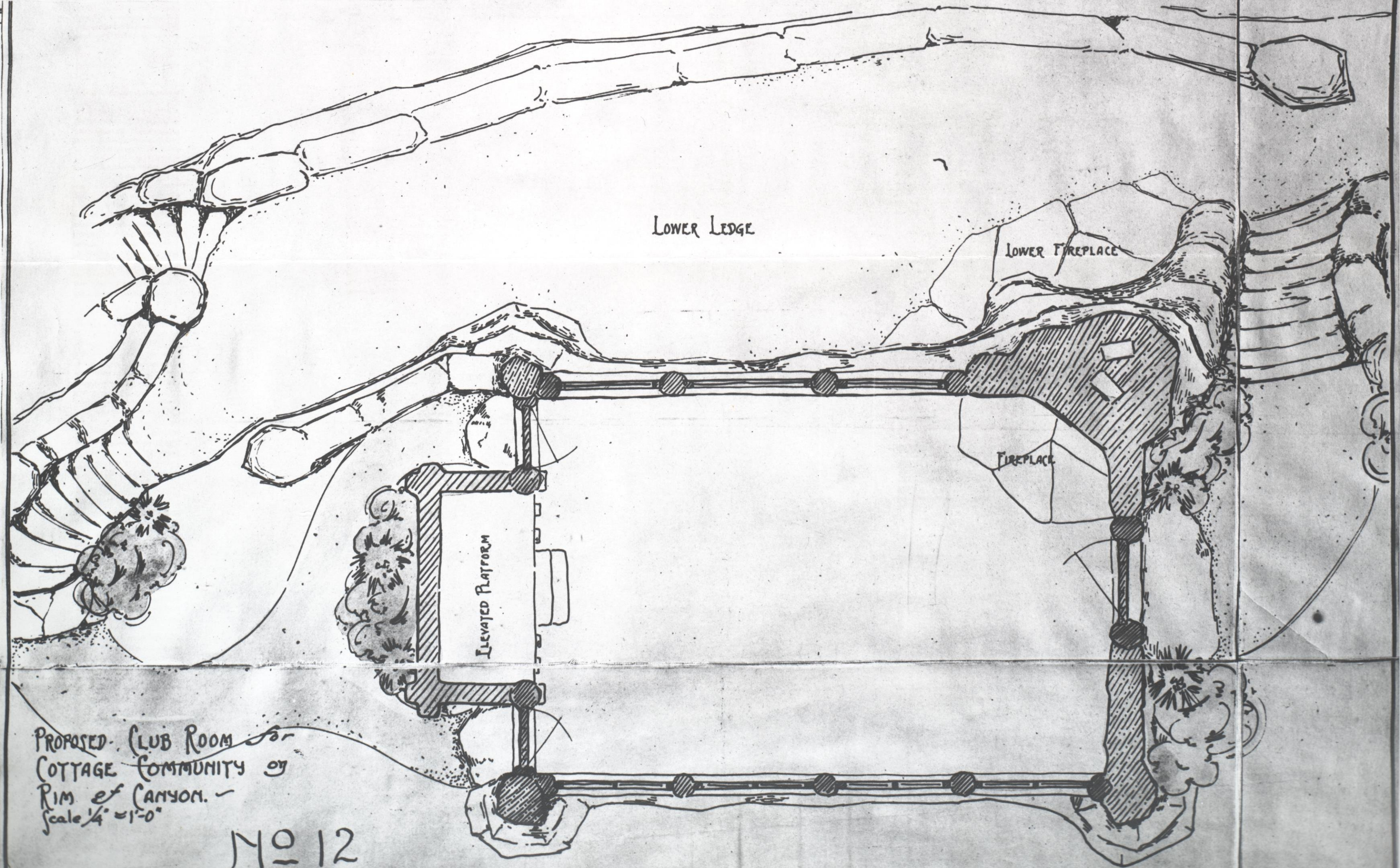
"TYPE C"
• ACCOMODATING SIX PERSONS •



"TYPE B"
• ACCOMODATING FOUR OR FIVE PERSONS •

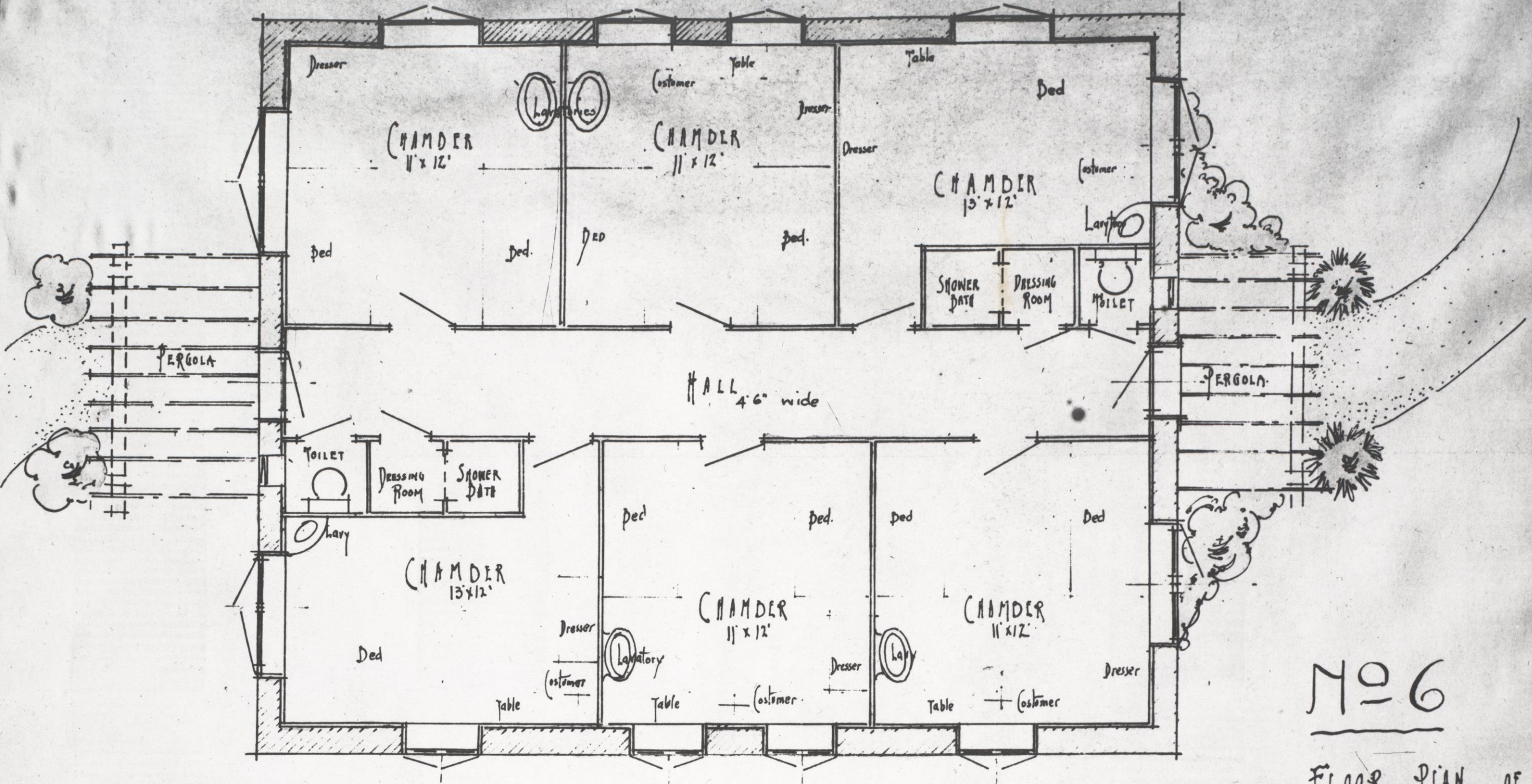
NO 11

• HOUSEKEEPING COTTAGES PROPOSED FOR COTTAGE COMMUNITY •
• HEAD OF DRIGHT ANGEL TRAIL •
• SLAB OR DOARDS & BATTEN CONSTRUCTION •
Scale 1/4" = 1'-0"
Aug. 1916



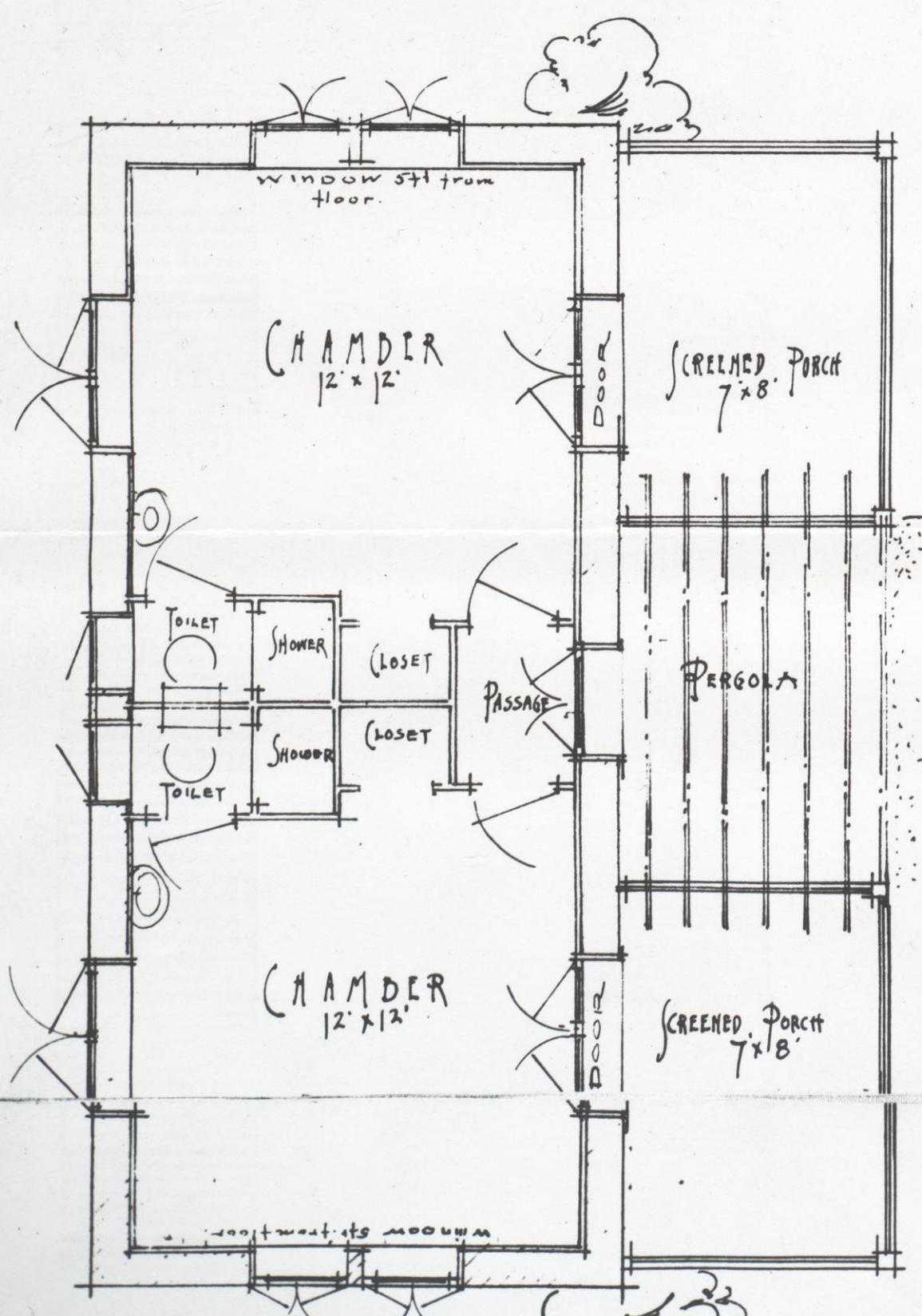
PROPOSED CLUB ROOM FOR
COTTAGE COMMUNITY OF
RIM OF CANYON.
Scale 1/4" = 1'-0"

NO 12

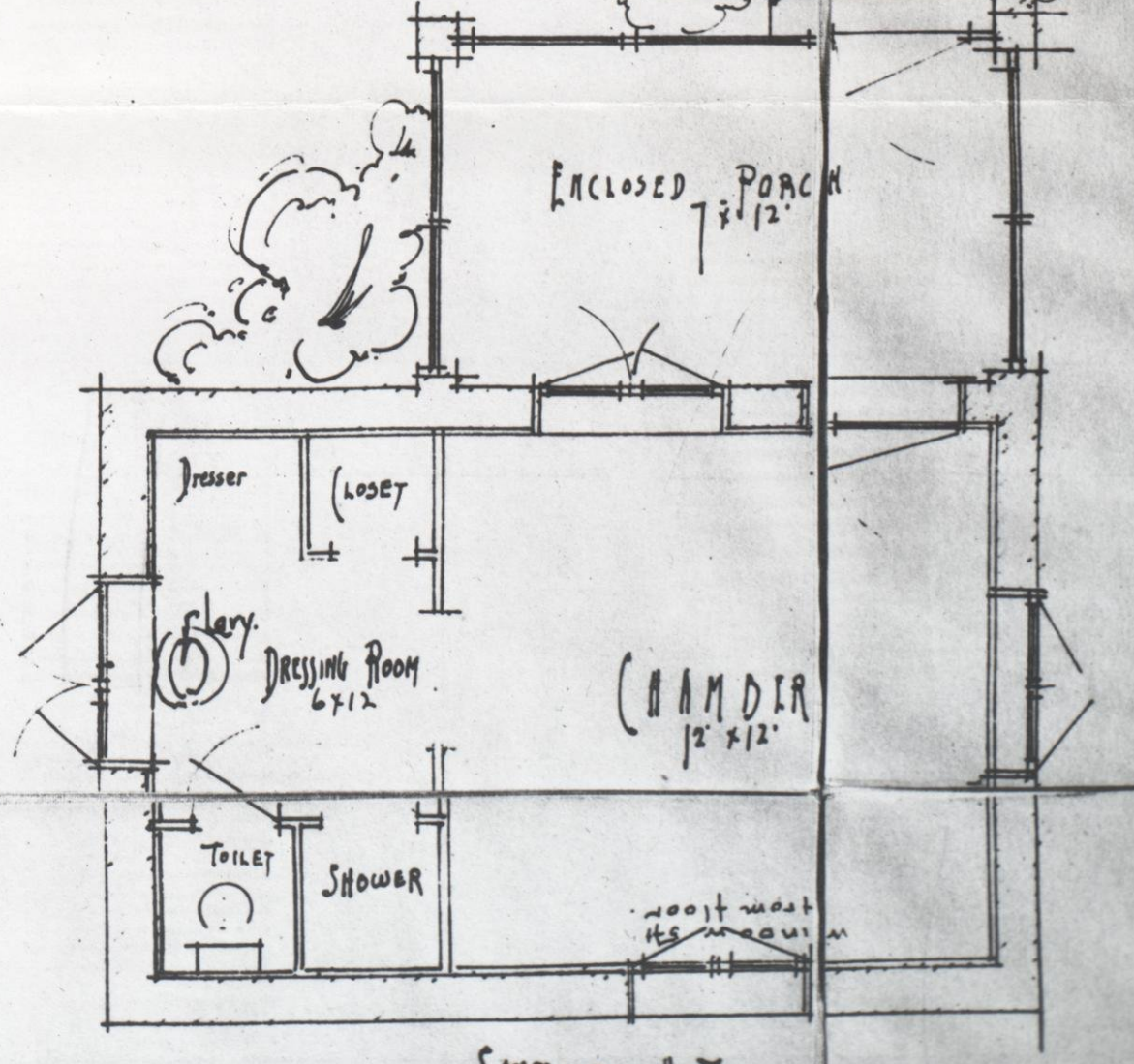


No 6

FLOOR PLAN OF STONE COTTAGE
 PROPOSED FOR INDIAN GARDENS.
 STYLE #1
 Accomodating 12 Persons.
 Nov 1916
 M.E.J.C.

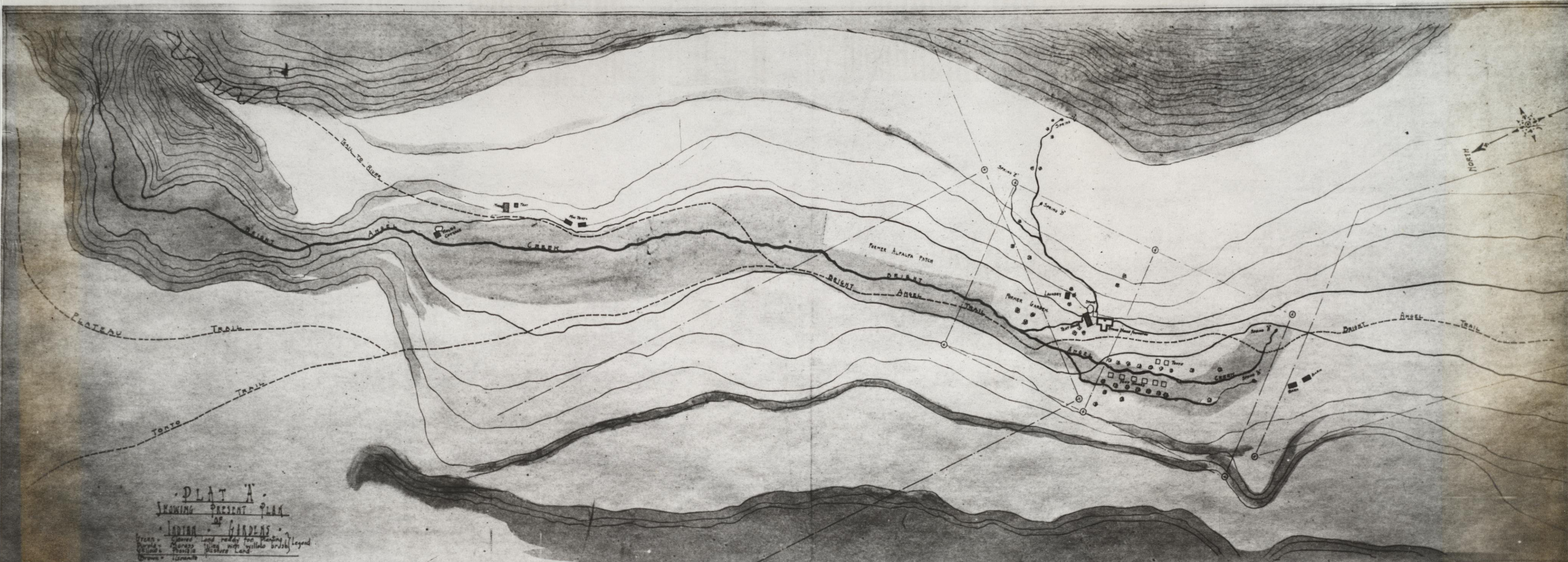


STYLE #2
 Accomodating 4 Persons.



STYLE #3
 Accomodating 2 Persons

No 7
 FLOOR PLANS OF STONE COTTAGES
 PROPOSED FOR INDIAN GARDENS
 NOV. 1916
 M.E.J.C.



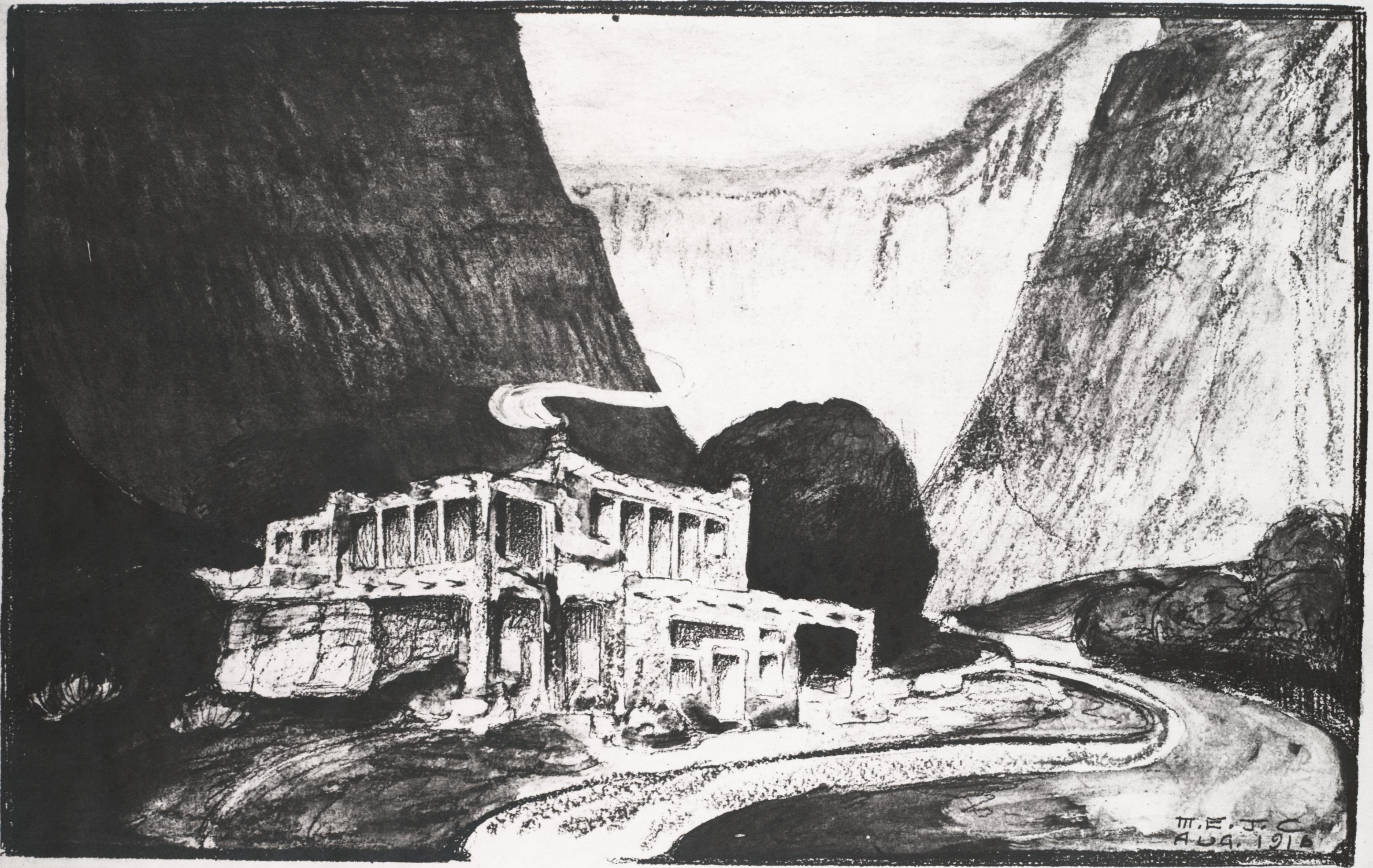
PLAT A.
SHOWING PRESENT PLAN
OF
INDIAN GARDENS.

Green lines = Land ready for planting
 Green = Pasture Land
 Yellow = Pasture Land
 Brown = Shrubbery

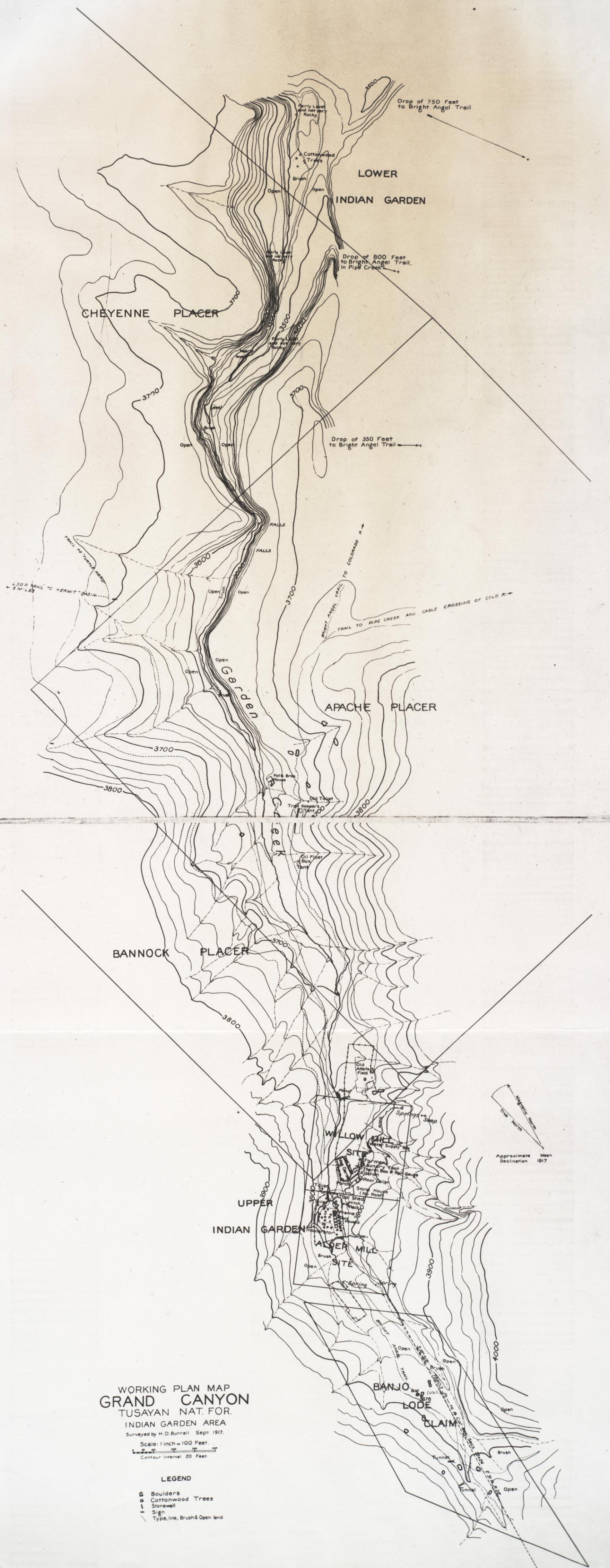


PLAT B.
SHOWING PROPOSED DEVELOPMENT
OF
INDIAN GARDENS.

Green lines = only approximate
 Green = Pasture Land
 Yellow = Pasture Land
 Brown = Shrubbery



GUEST HOUSE
INDIAN GARDENS - G.C.



CHEYENNE PLACER

LOWER INDIAN GARDEN

APACHE PLACER

BANNOCK PLACER

UPPER INDIAN GARDEN

WILLOW MILL SITE

ALDER MILL SITE

BANJO LODE CLAIM

**WORKING PLAN MAP
GRAND CANYON
TUSAYAN NAT. FOR.
INDIAN GARDEN AREA**

Surveyed by H.D. Burrall Sept. 1917.

Scale: 1 inch = 100 Feet.
Contour Interval 20 Feet.

LEGEND

- Boulders
- Cottonwood Trees
- Stonewall
- Sign
- Type line, Brush & Open land

Drop of 750 Feet to Bright Angel Trail

Drop of 800 Feet to Bright Angel Trail, in Pipe Creek

Drop of 350 Feet to Bright Angel Trail

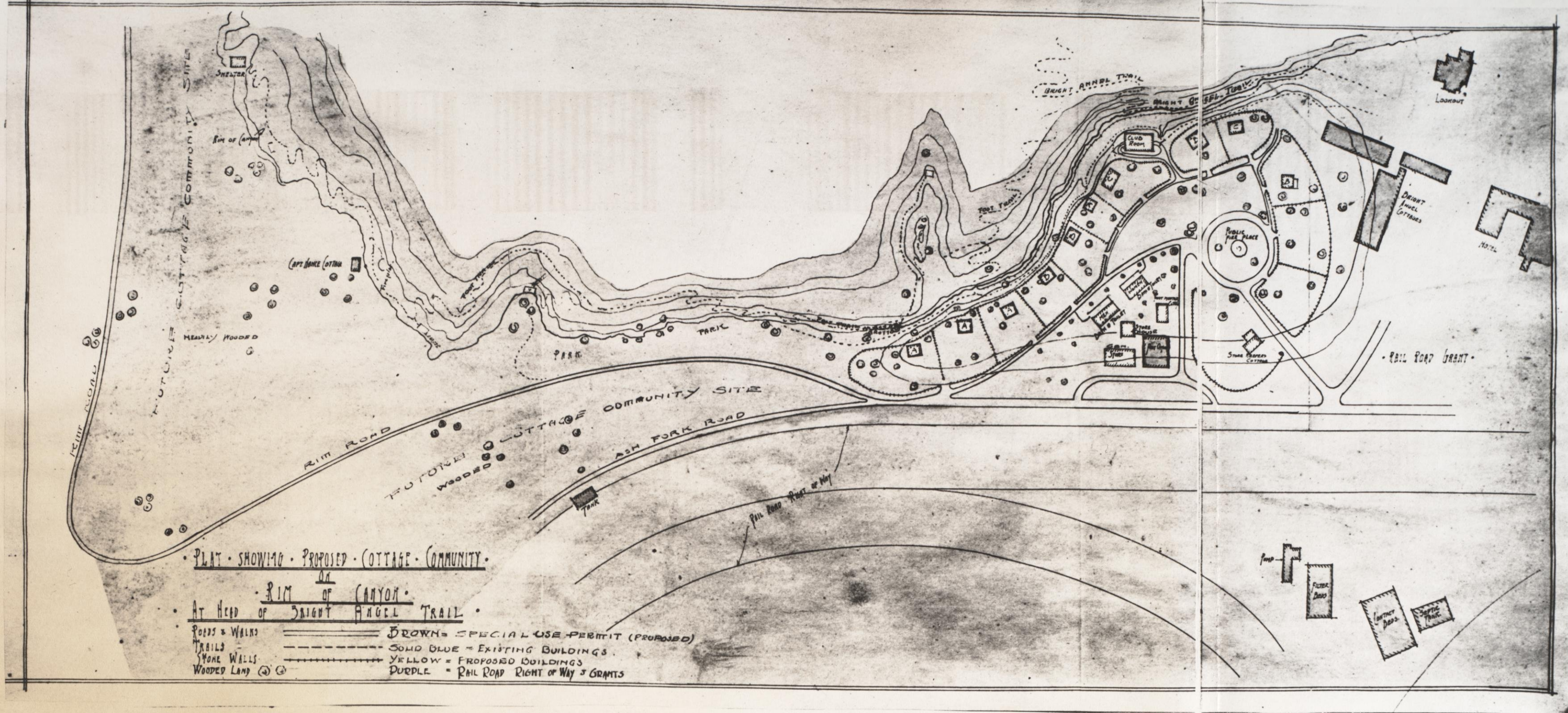
Magnetic North
True North
Approximate Mean Declination 1917

TYPICAL STONE COTTAGE
(ACCOMODATING 12 PERSONS)
PROPOSED for INDIAN GARDENS



#9

1001



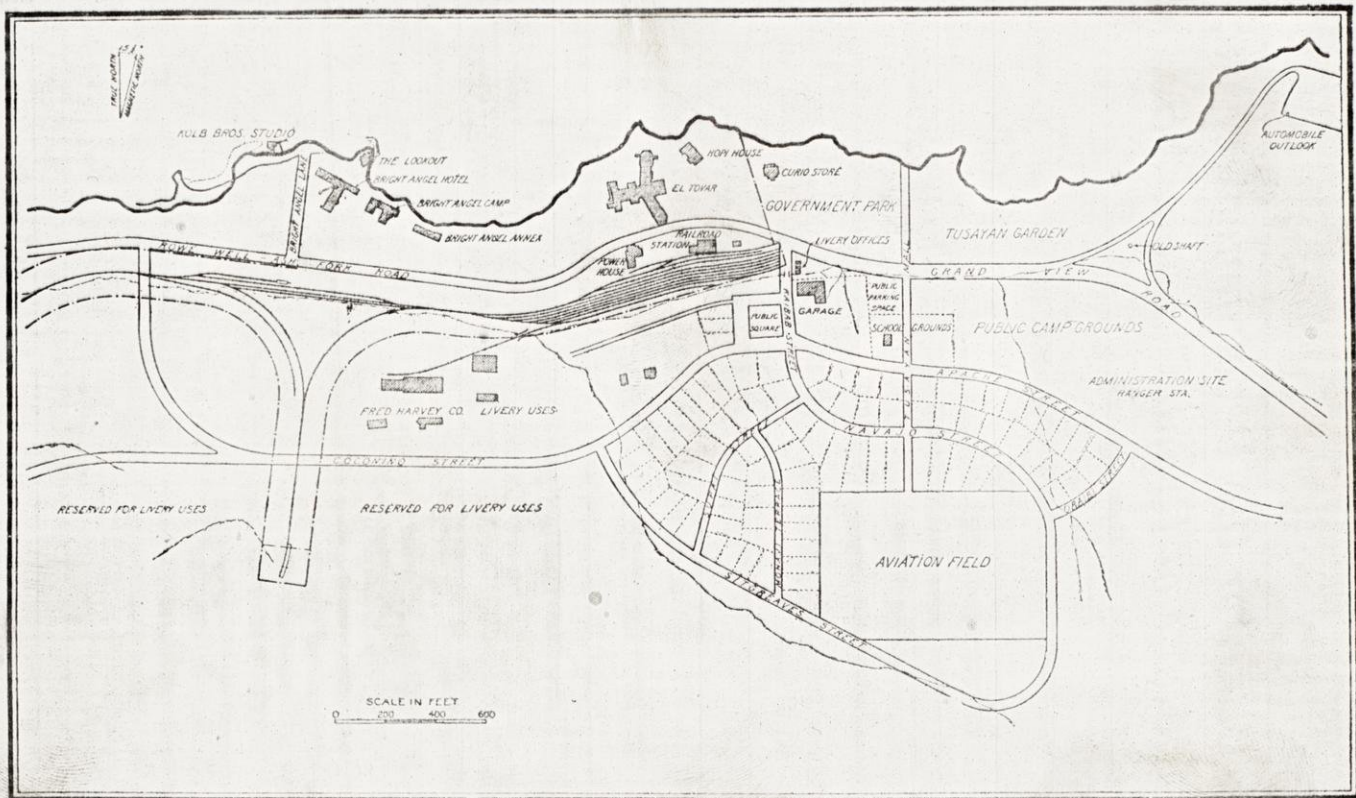
1/10

*A Plan for the Development of the
Village of Grand Canyon, Ariz.*

By
FRANK A. WAUGH
Collaborator

1918

U. S. Department of Agriculture
Forest Service



General plan of the Village of Grand Canyon, Ariz.

A Plan for the Development of the Village of Grand Canyon, Ariz.

ON THE southern rim of the Grand Canyon of the Colorado in Arizona stands the little village of Grand Canyon, the terminus of the Grand Canyon Railway, a subsidiary of the Atchison, Topeka & Santa Fe Railway, and the main gateway to the wonderful scenery of the present National Monument. This village has grown up under severe physical handicaps, serving the single purpose of assisting tourists to reach the famous and unique scenery of the canyon below and beyond.

Like most villages this has had a fortuitous and largely undirected growth. In the present instance, however, there have been causes operating to discourage the customary organization of local self-government, chief among them being the transient character of the local ties and interests of a constantly changing personnel. This lack of organization has kept away from Grand Canyon even that small measure of official influence which usually directs the affairs of new communities, including the problems of physical growth, such as the location and improvement of streets, the subdivision of land into building lots, etc. The case of Grand Canyon is in many ways abnormal.

NOTE.—During the progress of this work I have received the most cordial assistance from many members of the Forest Service. My grateful acknowledgements are due to all, and especially to Assistant Forester E. A. Sherman, Assistant District Forester Frank C. W. Pooler, Assistant District Forester Don P. Johnston, Forester Examiner Aldo Leopold, Forest Examiner Harrison D. Burrall, and Forest Supervisor T. Earl Wylder in charge at Grand Canyon National Monument.

Special mention should be made of the painstaking and illuminating study of Grand Canyon problems embodied in the "Grand Canyon Working Plan" (revised to Mar. 17, 1917) by Forest Supervisor Don P. Johnston and Forest Examiner Aldo Leopold. I have found this report of substantial value in the preparation of the present plans.

The Problem

HOWEVER, the territory in general, with certain material exceptions, belongs to the Government, has been erected into a National Monument by the President of the United States under the authority of an act of Congress, and is under administration of the Forest Service. Thus the Forest Service becomes responsible in a large degree for the growth and welfare of the community. And in view of this responsibility the Forest Service desires to provide for the community the best physical equipment within its power and the best form of administration available.

The present study is, in short, an attempt to develop a working plan for the physical growth of the village of Grand Canyon.

Physical Conditions

At present the village has a permanent population of 300 to 400, with an average visiting population of about 200 tourists.

A schoolhouse has been built and a good school organized, with an average attendance of 30 pupils. There is a post office. Religious services are held regularly, but there is no church building. There are no stores of the usual sort where household supplies can be bought. There is no recognized cemetery. Indeed, the village lacks many of the physical and social organs usually considered indispensable.

The Santa Fe Railway with its station, the Hotel El Tovar, and the Bright Angel Camp constitute the principal equipment for the accommodation of visitors, and around these the whole community revolves. A very few enterprises not under direct control of the railroad company cater to the individual needs of the tourists.

The land on which this village has grown up is rolling and generally well timbered. In the ravines are many good specimens

of western yellow pine; on the higher portions is a heavy growth of piñon and juniper.

Conditions of the Problem

Certain quite unusual conditions enter into this problem. These may be stated as follows:

The village is wholly dependent on the Grand Canyon and on the tourist traffic which it invites. Without the canyon there would be no tourists; without the tourists there would be no railroad entering here; without the tourists and the railroad there would not be a dozen permanent residents in the vicinity. This village has absolutely none of the usual business on which the growth of the ordinary town depends.

The town site faces abruptly upon the colossal scenery of the Grand Canyon—a landscape of the most intoxicating sort. If landscape ever has any effect upon individuals and communities, certainly such influences ought to be manifest here. It is worth noting that persons most familiar with the country all assert that these influences are powerful and effective. Usually they say that “the canyon gets on people’s nerves.”

A more direct and practical control is exercised by the complete lack of water supply in the neighborhood. At the present time the entire ration of water for all purposes (with negligible exceptions) is hauled in by the railroad over a distance of 120 miles. It is doubtful if another example of this kind of water supply on the same scale exists anywhere in the world.

The absence of running water naturally makes impossible the introduction of the usual sewerage system, thus presenting unusual problems of sanitation.

Another quite unusual condition is found in the Government control of the land. With certain exceptions, mentioned below,

the land belongs to the United States and can never become the property of the persons using it. On this territory official control is supreme, and may be extended to considerable lengths, as, for example, to the regulation of business and the censorship of architecture. This **Official Control** Government control is for the present exercised by the Forest Service of the Department of Agriculture; but there is a general expectation that the administration is soon to pass to the National Parks Service of the Department of the Interior. The imminence of this transfer has its own important bearing on the entire study, adding, as it does, an element of uncertainty to the whole situation.

The most serious exception to the Government ownership of the land in this territory is the tract of about 20 acres included in the right of way for railway station grounds of the **Railroad Holdings** Atchison, Topeka & Santa Fe Railway Co., and used by them chiefly for railway terminal and hotel purposes. Owing to the strategic location of this tract, and to the business advantages enjoyed by the railway company, the latter exercises a large control in the physical development of the community as well as in all business and social developments. It is only fair to add that the Atchison Railway and its subsidiary organizations* have shown a reasonably liberal tendency in the management of their enterprises and, generally speaking, an excellent spirit of cooperation in the plans of the Forest Service.

In the territory occupied by the village of Grand Canyon there are several important tracts of land encumbered by unperfected mining claims. For the present these claims constitute a troublesome factor in the situation. It is hoped and expected that some or all of these **Mining Claims** claims can be extinguished within the next few months. Under the terms of the present congressional authority constituting the Grand Canyon National Monument further mining claims can not be intruded into this territory.

Solution of the Problem

General Principles

IN APPROACHING a solution of the problem, under the conditions stated, it has been thought necessary to emphasize four general principles, as follows:

1. We are providing for a small community—one which, so far as we can see, has no commercial or industrial future, and one which in all human probability, will never have any extended growth, and which will never assume the character of a normal town.

2. Existing social relationships are unsettled and abnormal, and every endeavor should be made to introduce more natural social contacts, and especially to promote a social unity among the residents of the town.

3. The entire village, at its best, is merely an accessory to the canyon. It is only one, though the principal, entrance to the park below. It must therefore contribute chiefly to the needs of tourists, and must in all ways facilitate their acquaintance with the canyon itself. In particular it seems desirable that every endeavor should be made to assist in the circulation of tourists into the canyon and along the rim.

4. The village is there because of the visitors who are drawn to see one of the wonders of the world, and it is the interests of the public, not the interests of this little local community, that must be given primary consideration by the Government. For the same reason the village should not be planned on the supposition that it is to work out its own salvation. The Government is responsible to the public, trustee for the public, in effective control of the situation through land ownership, and must decide, not advise.

The town is more of a public utility than a social group. Therefore every part of the village plan must first submit to the test of being consistent with the interests of the visiting public and must be limited by that requirement.

The Physical Plan

It is now possible to present the various items of the physical plan in the light of the conditions set forth and of the principles just stated.

The present town is almost without form. The miscellaneous buildings are scattered at random over the land. There are no streets. Two country roads have wandered aim-

The Plaza lessly into the territory, where they seem to have lost their way. They meander helplessly here and there without reaching any particular points and without serving as boundaries to any blocks of land. In order to secure a physical center of organization I have planned the plaza. This is to be an open public square, as near the natural physical center of the territory as it is possible to come. Around this quadrangle there should eventually be grouped the principal public buildings. It should thus serve literally as a civic center, since here the civic or community interests would center.

If there should ever be a Federal building in the town (for which a bill has already been introduced in Congress), it should stand on the south side of the plaza. A post office there will certainly be; and if this is accommodated in a separate building, it should occupy a similar position. More probably it will be placed in one of the stores presently to be mentioned.

A church will be needed by the town and can probably be provided within the next few years. It is much to be hoped that this will be an interdenominational and genuine community

enterprise, and that one church may be enough. Such a community church should occupy a prominent place on the plaza, and a special lot has been reserved for it.

One of the most desirable articles of equipment at Grand Canyon is a community house or neighborhood building. Such a building should provide for a wide range of uses—the holding of public meetings, lectures, dances, movies, etc. It might serve as a public library, reading room, and clubroom. It might be equipped with billiard tables, bowling alleys, or other means of wholesome amusement. It should be provided by the cooperative effort of all interests at the canyon, being the genuine expression of community endeavor.

It is planned to place any stores, shops, and other business houses on the eastern and western sides of the plaza. A substantial and handsome garage already marks the northeast corner.

In the rather improbable event that more stores and business houses are some time required than can be accommodated on the lots now assigned to this purpose, extension can be secured in the normal manner by bringing into use some of the residence lots in the immediate vicinity.

On the north side the plaza will be faced by the railroad station. Along the south side of the railroad tracks, extending from the present garage westward to the company corrals and stables, runs a fringe of good timber, nearly all healthy young yellow pine. It is intended that this parking of natural timber shall be preserved and protected. At the same time the present reservation of this strip will make it possible to secure a moderate increase of trackage for the railroad if such a need should become pressing at a future time.

In its present estate the little square of land set aside for the plaza is dignified by the presence of a number of vigorous and beautiful yellow pines. The tract is typical of the best of this

kind of forest scenery. It is hoped that this character may be indefinitely preserved, and that the village of Grand Canyon may ever bear at its heart the sunny pleasant picture of the Arizona forest rather than the commonplace "ornaments" of the ordinary town. A little sympathetic effort should protect the present pine trees and plant others to follow them. I would recommend that the undergrowth be cleared away, and that as far as possible a grassy parklike surface be maintained.

Under no circumstances should any sort of building be permitted within the plaza; and this most positive recommendation is intended to cover every proposal, no matter how small. All monuments, band stands, fountains, and other structures of whatsoever sort should be absolutely interdicted.

Street Plan

The village is entered from the east by Grand View Road. This road is considerably used by automobilists coming from the east and from Flagstaff, and still more by tourists visiting Grand View and Desert View. The roadway has benefited by considerable local work, mostly given by the railway company.

From the west the Ash Fork Road enters, being joined at the outskirts of the village by the Rim Road. The latter road has been constructed by the railway company under Forest Service permit and is maintained by local cooperation.

These existing roads have been adopted bodily into the plan; also a short link of road crossing from north to south at the end of the railroad trackage and running thence westerly to the company stables. This latter section will supply the northern boundary of the plaza. New streets are to be laid out on the east, south, and west sides of the plaza; and these street lines will be continued to the east, south, and west, opening up the territory which seems to be most available for residences.

Other details of the simple street plan will be better understood by reference to the accompanying map.

It is the design to have these streets very simple and informal in character. For this reason the plan departs more or less from the usual straight lines. For the same reason the streets vary somewhat in width. The actual roadway should be much narrower than the allotted street space, and should in all cases be developed in a manner to save every likable tree. Yellow pines should be spared by preference, but no good piñon or cedar should be thrown away. These scattered trees will do more to preserve and accentuate the natural informality of the surroundings than any stately rows of street trees that could be grown beside full irrigating ditches. It should be clearly conceived that these streets together with the plaza are to give a distinctive character to this small village, and that that character is exemplified in the neighboring forests along the canyon rim and in the Tusayan National Forest through which we approach the town.

Lot Subdivision

In accordance with the primary intent toward informality of design, no rigid uniformity has been adopted in the subdivision of the space into blocks and lots. Rather has it been the desire to present a reasonable variety in size, form, and aspect of building lots. In general the residence lots are comparatively large. Since land is abundant and cheap, and since it seems important to avoid all appearance of crowding, one-quarter acre has been adopted as the ideal size for residence lots, though considerable variations have been permitted.

It is expected that these lots will never be sold, but will be leased under special-use permits by the Forest Service and its successors.

Yavapai Walk

It has already been stated as a governing principle of our study that we should circulate tourist visitors as widely as possible along the canyon rim. The opportunity for such dispersion of visitors seems to be more promising toward the eastward than in the opposite direction. Accordingly I have endeavored to present as many attractions as possible in this territory. The specific features incorporated in the plan are (a) Yavapai Walk, (b) Yavapai Point Outlook, (c) Government Park, (d) Tusayan Garden, and (e) the Automobile Outlook.

A fairly good footpath to Yavapai Point already exists. This, however, should be considerably improved, and in some sections relocated. In its final location this walk should touch the rim in about ten points only. These points should be carefully chosen to give the best views of the canyon and to secure the greatest variety of prospect. The intervening sections of the walk should fall back from the rim, and should run on easier ground among the piñon and cedar trees, thus supplying the desirable intervals of visual and emotional recovery between the excessively stimulating views into the canyon.

Cement walks should not be built, at least not beyond the section now occupied by Mr. Verkamp's store, but the footway should be cleared and smoothed just enough to make walking safe and easy for women and children.

Rustic benches should be placed at convenient places along this walk, especially at Grandeur Point, where several good seats should be provided.

Yavapai Point Shelter

Yavapai Point is the most popular outlook within the reach of the average tourist. Women, children, and others for whom the other canyon trips are too strenuous, commonly walk out to

Yavapai Point. These excursions should be distinctly encouraged; and to this end the improvement of the walk will contribute. The needs of foot passengers will be further served in a very substantial manner by the construction of a good shelter at the point. At present the point is much exposed. When the sun shines on the white limestone during the Arizona summer days the place is blinding, dazzling, burning hot. On days when the sun does not shine the visitor suffers the inclemencies of a driving wind or possibly of rain or snow. Nearly all walkers who use this route wish to rest at the point, as well as to linger for the enjoyment of the view. An adequate shelter would certainly be much appreciated.

In this particular spot I would recommend a treatment of the shelter building somewhat different from that wisely adopted at other points in this vicinity. Instead of trying to make the building invisible I would make it enter frankly upon the view from the rim near El Tovar. Without being obtrusive it might be so plainly visible from the neighborhood of El Tovar that every visitor would notice it. Even at that distance it should present an attractive appearance. It should interest the visitor. It will thus appear to offer a natural objective for a walk, and should promptly insemminate the desire to make the excursion thither. The detailed design for such a structure can easily be provided whenever needed.

Government Park

For many reasons I have felt it necessary to provide a reserved zone in the territory designated on the maps as Government Park. Other sections of the canyon rim in the region where tourists foregather have been in various degrees alienated from Government control. There should be a substantial zone left free from all encumbrances upon which the public shall have

unlimited freedom of action and the administration an undiminished jurisdiction.

This tract will also constitute an "official" approach to the canyon. It offers a route by which the casual visitor may pass directly to the canyon rim without crossing restricted ground or becoming beholden to any persons or powers. While the value of this consideration may seem more psychological than practical, some future shift of circumstance may raise it to a very serious level.

I have had further in mind the possibility that this area might some day supply the opportunity for developing an artistically effective introduction for the canyon view. Such a stupendous landscape really requires some introduction. The approach now used by custom is wholly lacking in all the elements which any landscape architect or other artist might wish to bring to such an overture. I confess that I do not see my way clear to the development of this idea at the present time, but I sincerely trust that at some future day the purpose may be fully realized.

For the immediate future I recommend that Government Park be very simply treated. The outlook along the rim will be preserved and, as far as needful, protected by a rustic stone wall. The native timber back from the rim will be preserved and improved, the dead trees being removed and the whole tract made clean and attractive. Seats will be provided, and any other simple features which may add interest to the space will be introduced.

The principal improvement proposed for immediate construction is a broad, straight walk—Tusayan Mall—rising by rustic stone steps from its junction with Grand View Road and running northward to the rim. This walk should be made dignified and inviting and of sufficient dimensions and importance to suggest that it leads to something worth while.

On the general plan it may be observed that this Tusayan Mall is shown as continuing southward in a straight line across Grand View Road, Apache Street, and Navajo Street to the projected aviation field. The steepness of the slopes will naturally bar from this right of way everything but foot traffic. Even for this purpose that part of the mall lying south of Grand View Road will not be needed for some years to come. The time may easily arrive, however, should the aviation field develop into a center of considerable interest, when such a public way would be a substantial convenience. The proposition on the plan looks only to such a possible future.

As it appears in black and white upon the map, this southern section of Tusayan Mall cuts in two the school grounds in an objectionable manner. Should the future development of the mall require it, the school ground and playground areas would have to be readjusted in accordance with the changed circumstances. Meantime present arrangements may remain undisturbed.

Tusayan Garden

Just to the eastward of the tract prescribed for Government Park and fronting southward upon Grand View Road is a warm, sunny slope now clothed principally with sagebrush. If the entire space is examined, from the road to the rim, there will be found a rather remarkable sampling of the native flora characteristic of the plateau throughout the neighboring districts of the Tusayan Forest. Early in September I counted over 50 recognizable species of flowering plants upon this area. I am confident that, with even a little trouble and expense, it would be easy to establish at least 100 native species.

My recommendation is that this tract be developed as a very unpretentious botanic garden, devoted exclusively to the local flora. Some very slight pathways along the hillside should make

it accessible to all. The several species should be marked with neat and inconspicuous labels.

Such a garden would require a certain amount of puttering care, but no heavy expense of maintenance should be expected. If some person connected with the local staff of the Forest Service will give the matter some personal and sympathetic attention the garden can be made a most attractive feature. Without such personal and sympathetic care no appropriations of funds will save it.

This garden, where visitors would be able to identify and to learn the correct names of interesting local trees, shrubs, and herbs, would certainly be of lively interest to many canyon visitors. The Tusayan Garden would very soon become one of the stock sights of the place. It would offer another interest to visitors, and would serve our fundamental purpose of dispersing them farther along the rim.

Automobile Outlook

Under present conditions the canyon rim can not be conveniently reached by automobiles except at a very few points. To remedy this situation and thereby provide another feature of interest along the rim eastward, I have proposed the development of the Automobile Outlook at a point somewhat northeast of the Tusayan Garden. At the point selected the canyon wall drops sheer for more than 1,000 feet, and through the resulting gorge the view opens unobstructed to the Indian Gardens below, wide reaches of the mesa and to the peaks and "temples" beyond. The view is one of the most impressive in this vicinity.

The rim would require protection here by a suitable rustic wall and a few seats should be provided. Just back of the rim a large parking space is planned where the automobiles of a visiting excursion could be accommodated. This parking space and the Automobile Outlook are easily reached by a spur road running up from Grand View Road along a small ravine.

Buttinski Mine Shaft

Near the point where this automobile spur leaves Grand View Road, and at one corner of the Tusayan Garden, is the still open shaft of an unworked mine. It is hoped and expected that the mining claim will soon be invalidated; but it would be a wise conservation of "local color" if the old shaft could be preserved.

Attractions Westward

Visitors should also be encouraged to perambulate the rim to the westward. Two specific attractions already exist in the "Look-out" on the railway property and the Kolb Bros.' studio.

The head of Bright Angel Trail also serves as a mild interest to some visitors, and might be made still more attractive by simple means.

In part to emphasize the Bright Angel Trail and in part to provide a permanent public right of way between it and the present highway, I have recommended in my plan the reservation of a strip, to be called Bright Angel Lane, approximately 50 feet wide, running along the western line of the railway property from Ash Fork Road to the head of the trail on the canyon rim. This land lies in the present Cape Horn claim, which claim it is hoped soon to extinguish in favor of the United States. By a small amount of work the Bright Angel Trail can be brought up over the rim at this point and its approach shifted to the proposed Bright Angel Lane.

The whole idea of the Bright Angel Trail is alluring in the extreme. The reputation of the trail is widely spread, and visitors knowing of it come to the canyon with their imaginations full of poetry, romance, and adventure. Unfortunately the present approach to the trail is a rude shock to these valuable prepossessions. Nothing could be less poetic or romantic than the path meandering between corrals, farm machinery, blackened incinerators, outbuildings, and through back yards.

I have personally urged upon the officers of the Santa Fe Railway and of the Fred Harvey Co. that they abandon this present approach and make the most of the new one which I hope will receive immediate development at the hands of the Forest Service.

Interest in the Bright Angel Trail may be further fostered by a more extended use of the facilities afforded at Kolb Bros. studio. There is pending also an application from the Fred Harvey Co. for a permit to build a clubhouse and observatory near the head of the trail which would be kept open for public use.

The same company proposes further to construct a number of small cottages near the rim to be rented to canyon visitors, and to develop a small and picturesque outdoor community in the vicinity of the projected clubhouse. Such a project has my approval in principle, both as supplying an additional interest farther westward and as meeting the practical needs of those who want to see the Grand Canyon.

Even more interesting in its possibilities is the project of the Fred Harvey Co. in connection with the developments just mentioned, to improve a considerable area contiguous to the clubhouse and cottages and lying immediately below the rim. Here it is possible to construct an extended series of paths, outlooks, and resting places, to be open to the public, which might supply extended entertainment to many visitors. These improvements should include the preservation and exhibition of the really beautiful Indian pictographs found in one of the caves under the rim; and I would especially recommend that the Forest Service and its successors take every care to preserve these ancient relics.

Livery Offices

At the present time one permit is pending for a permanent location for a livery office. Other liverymen have in the past desired such locations and similar applications may come forward in the future. The most usable spot for such offices is universally conceded to be the small triangle of land on which the tent office of the Forest Service recently stood, just east of the railway station and south of Grand View Road. I have accordingly set this aside for that purpose in my plan. I would insist that the offices be substantial permanent structures, agreeable to the eye, and that they front squarely westward upon the street, the fronts being carefully placed parallel with the street line, and the offices having an equal setback. The offices should further be carefully located so as to save as many as possible of the good yellow pines on the tract.

The space in the rear of the offices may be used for loading passengers.

Administrative Office

The location already selected for the Forest Service office on which a small building has been constructed does not seem to me altogether satisfactory. At the same time I have not been able to find a better location under existing conditions. In case the proposed Government Park should be considerably developed at a future time, and in case the Verkamp location should revert to the Government, to be added to Government Park, it would seem likely that the administrative office and museum could be given a better position with special reference to this park area. The investment now proposed for the administrative buildings is so small that it does not promise to be impossible to remove or rebuild them on a new site if a commanding opportunity offers later. Or in case a Federal building should be erected as pro-

posed on the south side of the plaza, the administrative offices and museum would naturally be transferred to quarters there.

Ranger Station

The present ranger station, residence of the forest officer in charge, is at Rowe's well, $2\frac{1}{2}$ miles from the administrative office. The arrangement is a source of considerable inconvenience, and there has been much discussion of plans for another location nearer by. The best near-by location in my judgment is to be found on the area south of Grand View Road and just east of the present public camp ground. While I am by no means convinced that a change from Rowe's well to this locality is desirable, all things considered, I am clear that the transfer may be much more important under other circumstances at some future time. I would therefore recommend that the tract described be reserved for administrative purposes, having in mind the possibilities of a superintendent's residence and other conceivable contingencies.

Automobile Parking Area

There now exists an urgent demand for a small parking space in the near vicinity of the railway station, the hotel, and the rim where automobiles may be safely left for a few hours while visitors are taking meals or viewing the canyon. A convenient space for such parking is offered just south of Grand View Road, west of the public camp ground and east of the livery office area. Here automobiles would be safe because always in full view, and they would be convenient to the public garage.

This assignment of space also has the advantage of quick convertibility, for the tract can readily be used for some other purpose when changing conditions bring new requirements to the fore.

School Grounds

In designing the new streets and subdivisions of lots I have had in mind the necessity of keeping ample space for the school grounds. While the space now allotted is enough for present needs, it may be desirable to allow for further school enterprises beyond the street to the southward. I have particularly in mind the possible need for a baseball diamond. Other requirements may be discovered at any time, and it would seem unfortunate for a school to be hampered for land in a territory where this commodity is so plentiful and cheap. Should the proposed Tusayan Mall develop into an important thoroughfare at some future time (see map facing page 3), the school grounds as at present laid out would suffer materially. As there would certainly come at the same time the demand for a larger school building, it would seem that the best way to meet such a situation would be to remove to a new site. As a better location can be found farther east, this contingency may be faced without misgivings.

For the time being the pupils of the public school will probably be best served with a liberal supply of simple play apparatus, such as swings, teeters, slides, bars, giant stride, etc. These can be made by the pupils with the help perhaps of the forest ranger. I have discussed this matter with Mr. T. Earl Wylder, now in charge for the Forest Service, and believe that all requirements can be met.

Livery Stable Zone

The best predictions which we can now make give the livery service a large part in the accommodation of canyon tourists for many years to come. The stables now used by the Fred Harvey Co. are therefore regarded as a permanent feature of the community equipment and are provided for in their present position with room for expansion southward.

The possibility that other operators might need stables has also been kept in mind, and a space for such stables has been reserved west of the present railroad Y.

Cemetery

If Grand Canyon comes to be a town where people live, it is inevitable that they will also die there. And a cemetery is always a necessary item in a community plan. There have already been several scattered interments in the neighborhood, reminding us that we must not delay to make a more sober and civilized provision against such contingencies.

A pleasant, slightly secluded tract of land, bearing a number of dignified yellow pine trees, has been selected for the town cemetery. It lies to the eastward of the village and north of Grand View Road. It is my expectation to prepare a detailed plan for this tract in the near future.

Aeroplane Landing

It may sound visionary at this time to include an aeroplane station as a part of a community plan. Yet, unless all signs fail, the aeroplane is soon to be a common instrument of daily business and pleasure. My own prophecy is that this situation will soon be with us, and that the aeroplane will early come to play a considerable part in canyon service. Since a reservation for the accommodation of aeroplanes can be made without injustice to any current interest, we may hope that this part of the plan may be passed with nothing worse than a smile.

Special Recommendations

In conclusion, I have two special recommendations to make upon matters which will have a considerable influence on the future development of the village for which we are now making plans.

The first of these is that immediate steps be taken by the Forest Service to secure an investigation by competent engineers of the possibilities of water supply, of sewerage, and of lighting for the town of Grand Canyon.

The second recommendation is that the administration representing the Federal Government facilitate in every way and at the earliest favorable moment the establishment of some form of self-government for the permanent residents of the town. Usually an American community can be relied upon to organize upon its own initiative, but in this case the individuals forming the community change so constantly that organized assistance appears necessary to facilitate growth and secure stability during the earlier stages of development.

Immediate Improvements—Costs

Some of the specific improvements which ought to be made at a very early date and their cost, as roughly estimated, are as follows:

1. Improvement of Yavapai Trail, station grounds to Yavapai Point, 2 miles.	\$300
2. Shelter at Yavapai Point (estimate low).....	200
3. Seats at Grandeur Point.....	25
4. Seats, 120 feet of wall, and other improvements at Automobile Outlook....	150
5. Construction of 600 feet of road from Grand View Road to Automobile Outlook, and of parking space.....	50
6. Grading grounds on automobile parking space.....	100
7. Clearing and grading streets about plaza, approximately 350 linear feet....	15
8. Clearing and rough grading other new streets, approximately one-half mile.	250
9. Re-forming entrance to Bright Angel Trail.....	200
10. Steps and path in Government Park.....	200



Things To Do At Grand Canyon

<i>Trip</i>	<i>Distance</i>	<i>Conveyance</i>
Hermit Rim Road to Rest House	7½ miles west	Carriage, saddle horse.
Hopi Point	2 miles west along Rim	Foot, horse, or carriage.
Hopi Fire Lookout Tower (Tower open from May 1 to October 15, 8 a. m. to 5 p. m.)	Hopi Point	Foot, horse or carriage.
Yavapai Point	1½ miles east along Rim	Foot.
Bright Angel Trail	5 miles to plateau	Saddle mule.
Bright Angel Trail	7½ miles to river	Saddle mule.
Hermit Creek Trail to River and Hermit Camp	2 days	Saddle mule.
Grandview Point	13 miles east	Motor.
Desertview	32 miles east	Motor.

Entertainment

Moving picture lecture of trip through Grand Canyon by boat at Kolb Brothers' Studio at head of Bright Angel Trail, 5 p. m.

Hopi Indian Dance at Hopi House, 8 p. m.

Curios, Pictures, Etc.

Fred Harvey, Kolb Brothers, Verkamp, along Rim.

Livery

Carriages available from W. W. Bass.

Automobiles, carriages, saddle horses, and saddle mules available from Fred Harvey.

For further information inquire at office of Forest Service.