

~~2280~~

1-81

January 05, 1981

Attention: Don Warner

Dear Sir;

I propose to place one step twelve feet long, seven inches high, and placed three feet onto the city sidewalk (property line) at the address of 222 North 7th Street as shown on attached blueprint.

I understand this to be a revocable variance under the city's said provisions. The work is to be done by Fenske Construction under Constructor's West license number 2800748, building permit No. 6197.

Mark Paul Fenske
Fenske Construction

J. Williams
2639 Dahlia Dr.
City 81501

1/81

4 SC Partnership
P.O. Box 3112
City 81502

1/81

D. Laycock
760 Glenwood Ave.
City 81501

1/81

Mark Fenske
222 North 7th St.
City 81501

1/81

mailed
1/20/81 CA

NORTH $\frac{7}{8}$ "

$\frac{1}{4}$ " = 1'-0" SCALE

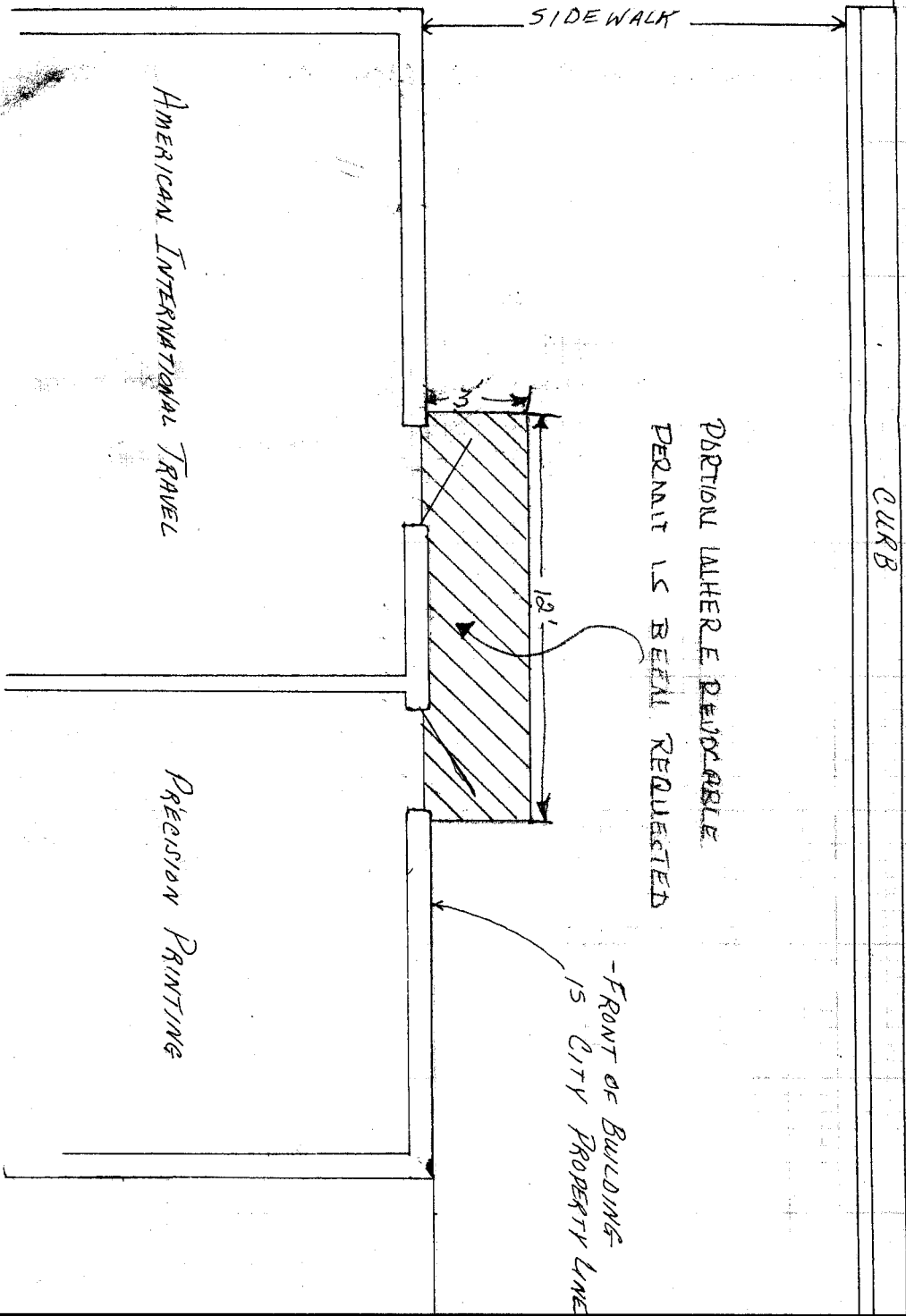
CURB

ALLEY

SIDEWALK

PORTION WHERE REMOVABLE PERMIT IS BEING REQUESTED

-FRONT OF BUILDING IS CITY PROPERTY LINE



PROPOSE TO PUT ONE
ACCESS STEP THREE FEET
BY TWELVE FEET BY SEVEN INCHES
HIGH FOR BOTH BUSINESSES

REVIEW SHEET SUMMARY

FILE# 1-81

ITEM REVOCABLE PERMIT

DATE SENT TO REVIEW DEPT. _____

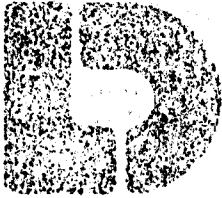
DATE DUE _____

PETITIONER _____

LOCATION _____

DATE REC. AGENCY COMMENTS

01/27/81 FRANK/SIMONETTI PASSED 5-0 A MOTION TO RECOMMEND APPROVAL TO THE CITY COUNCIL OF #1-81 REVOCABLE PERMIT FOR A STEP IN THE CITY RIGHT OF WAY AT 222 NORTH 7TH STREET, AS PRESENTED IN THE DRAWING.



Lincoln DeVore

1441 Motor
Grand Junction, Colo 81501
(303) 242-8968

January 5, 1982

Jim Lindell
843 25 Road
Grand Junction, CO 81501

RE: PRELIMINARY
SUBSURFACE SOILS INVESTIGATION
RUSTY SUN SUBDIVISION
GRAND JUNCTION, COLORADO

Gentlemen:

Transmitted herein are the results of a Preliminary Subsurface Soils Investigation and Foundation Recommendations for the proposed Rusty Sun Subdivision near Grand Junction, Colorado.

Respectfully submitted,

LINCOLN-DEVORE TESTING LABORATORY, INC.

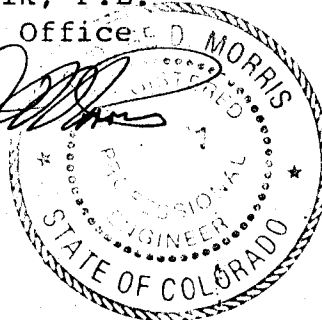
By: 

Gary M. Krzysnik, P.E.
Grand Junction Office

Reviewed by: 

GMK/jb

LDTL Job No. 42187J



ABSTRACT:

The contents of this report are a Preliminary Subsurface Soils Investigation and Foundation Recommendations for the proposed Rusty Sun Subdivision near Grand Junction, Colorado.

Topographically, the site is predominantly level at both parcels, except for the edge along Indian Wash. Both surface and subsurface drainage are fair to poor.

After consideration of the investigation and testing program described herein, it appears that either a shallow foundation system of more or less conventional design or a grade beam and drilled pier system would be appropriate for portions of this development. Depending on local soil conditions, maximum allowable pressures of 2000 to 3000 psf on the native alluvial soils and 5000 psf on the underlying shale bedrock would be appropriate for foundation design. Minimum pressures required to resist possible swell are 500 to 2100 psf, respectively.

Because of the expansive nature of the foundation materials, we would recommend that the foundation system be well balanced and heavily reinforced.

All floor slabs on grade must be constructed to act independently of other structural portions of the buildings.

Adequate drainage must be provided at all times. Water should never be allowed to stand or pond above the foundation materials. A subsurface peripheral drain should be placed around the exterior of the structure at the foundation level, connected to the bottom of floor slabs or surface of the ground with a gravel-vertical drain.

A Type II Cement would be recommended in all concrete in contact with the soil on this site.

More detailed recommendations can be found within the body of this report. All recommendations will be subject to the limitations set forth herein.

The information contained herein has been obtained to provide a general and preliminary indication of the soils which will probably be found under presently unknown types of structures proposed for the site. Site specific information must be obtained beneath each proposed structure after its exact location is determined, since the soil types and conditions differ across the overall site and the types of structure proposed are unknown.

This report is intended to identify general soil conditions on the site, as requested. Five (5) test borings spread over a 8 acre site, can only be used as an over-view of the soil conditions and not for site specific design purposes.

GENERAL:

The purpose of this investigation was to determine the general suitability of the site for construction of the Rusty Sun Subdivision, parcels 60 and 61 of Filing 2 of the Indian Village Subdivision, Grand Junction, Colorado.

Although Lincoln-DeVore has not seen a set of construction drawings for any of the residential units proposed, we believe that they will be basically frame structures of more or less conventional design. Foundation loads for structures of this nature are normally light to medium weight in magnitude.

The topography of the site is flat and low lying. The parcels are located adjacent to Indian Wash on the alluvial plain of the Colorado River. The site has a general slope to the south, so that surface runoff will eventually reach the river. The exact direction of drainage will be controlled by local streets and ditches around the area of the structure, but in general, will be toward the south. Both surface and subsurface drainage range from fair to poor.

The foundation soils encountered on this site consisted predominantly of alluvial deposits. The

deposits are placed by past flooding action from the Colorado River; with the more granular surficial soils placed by the relatively more recent flood action of Indian Wash. These soils were deposited over bedrock of the Mancos Shale Formation.

The Mancos Shale can broadly be described as a thin-bedded, drab, light to dark gray marine shale, with thinly interbedded fine grain sandstone and limestone layers. Some portions of the Mancos Shale are bentonitic, and therefore, are highly expansive. The majority of the shale, however, has only a moderate expansion potential. Formational shale was encountered in Test Boring No. 1 through 3, inclusive, at a depth of 3 to 13 feet. It is anticipated that this formational shale will directly and significantly effect the construction and the performance of the foundations on the site.

At this time, it is not known if any portions of either parcel actually lie within the 100 year flood hazard zone of Indian Wash, although the parcels are believed to be generally outside of such a hazard zone, if any. We understand that a flood hazard study was done recently by the Corps of Engineers of which we have not, as yet, obtained a copy. We strongly urge review of the results of this study, if available, or a study specific to this site to determine if any

hazard exists for parcels 60 and 61. Mitigation methods can then be developed, if necessary, that are consistent with state and local ordinances relating to such matters.

BORINGS, LABORATORY TESTS AND RESULTS:

Five (5) test borings were placed on the site, at locations indicated on the attached Test Boring Location Diagram. These test borings were placed in such a manner as to obtain a reasonably good profile of the proposed construction site subsurface soils. Some variations were noted in the soil profile, but in general, the profile was found to be fairly uniform, so that further test borings were not deemed necessary at this time. All test borings were advanced with a power-driven, continuous auger drill and samples were taken with the standard split-spoon sampler and by bulk methods.

The precise gradational and plasticity characteristics associated with the soils encountered during drilling can be found on the attached summary sheets. The representative number for each soil group is indicated in a small circle immediately below the sampling point on the Drilling Logs. The following discussion of the soil groups will be general in nature.

The soils profile found on this site can be broadly described as a two layer system. The upper 3 to 13 feet of the profile was found to be moderate to low density alluvial soils at parcel 60. Beneath this surface

layer, the soils were found to consist of Mancos Shale bedrock. At parcel 61, the alluvial deposits extended to a depth of 25 feet where the borings ended without encountering bedrock.

Soil Type No. 1 classified as a sandy silt (ML) of fine to medium grain size. Soil Type No. 1 is moist, of very low plasticity and of moderate to low density. In themselves, these soils will have virtually no tendency to expand upon the addition of moisture nor to long-term consolidation under applied foundation stresses. Granular materials, such as these, do have a tendency to rapidly settle under the initial application of static foundation pressures. However, these settlements are characteristically fairly rapid in nature and should be virtually complete by the end of construction. In any event, if the allowable bearing values given in this report are not exceeded, and if recommendations pertaining to inspection, reinforcing, balancing and drainage are followed, it is felt that differential movement can be held to a tolerable magnitude. At shallow foundation depths across the site, these soils were found to have an average allowable bearing capacity on the order of 2000 to 3000 psf. Pending site specific examination of soils, a maximum pressure of 2000 psf would be appropriate for the preliminary design of foundations at this

site. Due to the proximity of firm, wet silty clay of some expansion potential below the Type No. 1 soil, a minimum pressure of 500 psf will be required in most areas.

Soil Type No. 2 classified as a silty clay (CL) of fine grain size. Soil Type No. 2 is plastic, generally of high moisture content and of low to moderate density. These soils have a distinct tendency to expand upon the addition of moisture with swell pressures on the order of 2065 psf being considered typical when soils are in the dry state. Approximately 500 psf swell pressure required in the wet state in which the soil was found. While this magnitude of expansion should not be sufficient to affect the heavy structural members of the building, it can cause some movement beneath light structural members and floor slabs on grade. These soils will have a moderate tendency to long-term consolidation under applied foundation pressures. However, if the allowable bearing values given are not exceeded, we feel that differential movement would be tolerable. This soil group was found to have an allowable bearing value on the order of 1500 to 2000 psf maximum where it occurred in parcel 61 (Test Hole Nos. 4 and 5). At parcel 60, Soil Type No. 2 occurred in a very low density state and would not be recommended for direct foundation support. Wherever foundations bear on or close to this soil type, a minimum pressure of 500 psf will be required to resist the remaining swell potential of this generally wet material.

Soil Type No. 3 classified as silty clay (CL) of fine grain size. Soil Type No. 3 is typical of the formational shale which underlies the site and serves as bedrock in the area. Soil Type No. 3 is plastic, of very low permeability and of high to very high density. The shales are expansive in nature with swell pressures on the order of 2110 psf being measured. Should drilled piers be used for the building, the expansive nature of the fine grained bedrock must be given consideration. Owing to its initial high density condition, these soils would have virtually no tendency to long-term consolidate. At a penetration of 5 feet into the shale layer, tip bearing capacities on the order of 10,000 to 12,000 psf could be achieved. It is important to note that a small water-bearing fracture zone occurred at a depth of 18 feet in Test Hole No. 1. Such fractures, if detected by a more detailed investigation at any specific site, may necessitate the use of a lower maximum allowable bearing pressure than recommended herein in order to minimize settlement due to compression of the fractures. Also, a minimum pressure of 2100 psf must be maintained to resist the potential swell of the fine-grained bedrock. Where this shale occurs at very shallow depths, resulting in the use of a pad and grade beam type of

foundation, a maximum allowable pressure of 5000 psf would be appropriate for preliminary foundation design. Soil Type No. 3 was found to contain sulfates in detrimental quantities.

Free water was found at parcel 60 at a depth of 18 feet in Test Hole Nos. 1 and 2, with no free water in Test Hole No. 3. It is felt that rather than being a true free water surface, the moisture encountered was actually perched above the formational shale materials and was traveling through the fractures in the weathered zone. This is substantiated by the fact that moisture was noted in the fractures of the weathered shale. Due to the seepage encountered in this weathered shale zone, as well as the potential for seepage in the overlying materials, subsurface peripheral drains around the structures are strongly recommended. Additionally, water may be encountered during construction, especially in deeper excavations and dewatering techniques may be necessary. It is felt that the quantities of water to be anticipated can be handled by sump pits and pumps during construction.

At parcel 61, the deeper soils were of very high moisture content, believed to be due to the proximity of the site to Indian Wash and the Colorado River as well as to past and present irrigation practices in the general area (the site is between the Highline and Grand Valley Canals).

Such moisture conditions will directly affect basement construction by necessitating the use of dampproofing materials and peripheral drains. In addition, the nature of the foundation soils in the area is such that the formation of areas of perched water is quite possible. If these wet areas are encountered during foundation excavation, some pumping is possible. This is a temporary, quick condition caused by vibration of the equipment on the site. If this should occur, it can be stopped by removal of the equipment and greater care taken in the excavation process. If this does not stop the pumping, properly placed coarse rock should be worked into the soil or properly designed geotechnical fabric could be applied to the earth face. The foundations could also be redesigned based upon lower bearing values if large amounts of seepage are encountered. It is emphasized that minor pumping is a temporary, quick condition and should not affect the structure after it is completed.

CONCLUSIONS AND RECOMMENDATIONS:

Since the exact magnitude and nature of the foundation loads are not precisely known at the present time, the following recommendations must be somewhat general in nature. Any special loads or unusual design conditions should be reported to Lincoln-DeVore so that changes in these recommendations may be made, if necessary. However, based upon our analysis of the soil conditions and project characteristics previously outlined, the following recommendations are made.

In general, the soils found across the subdivision will form a reasonably good base for the proposed residential structures. Moderate density sandy silts were encountered at or near the present ground surface in the region of the majority of the test borings drilled. For these non-expansive (or low expansive) areas, spread footings of various widths, in conjunction with a reinforced concrete grade beam stem wall, will probably be the most suitable foundation type, if the higher expansive clays are not located within 3 feet of the bottom of the foundations.

For those areas of the subdivision where the clays or shale bedrock are encountered, foundations must be designed with the expansive potential of the subsurface

soils in mind. The foundation configuration which can be used on the expansive materials will depend upon the magnitude of foundation loads exerted by the residential units as well as the exact degree of expansion anticipated from the soils. Several foundation types are acceptable for use on the materials. These foundation configurations would include, but are not limited to:

- 1) The most common option would consist of the engineered no footing design, with the stem wall resting directly on the ground surface. The judicious use of voids would be employed to balance the structure and to increase the contact stresses beneath any very light walls. For most moderately loaded foundation systems, this voided stem wall design would probably prove satisfactory considering the magnitude of expansion pressures encountered across the subdivision, and the anticipated foundation loads for these residential dwelling units. We would anticipate that the majority of the foundation systems used on the clays across the subdivision will fall into this category.
- 2) The second option would consist of a drilled pier and grade beam system with the drilled piers extended to bear in the underlying Mancos Shale. This option would be useful in areas of parcel 60 where shale is 5 feet or more below grade, no basement construction is planned and the overburden soils are of low density. The expansive clays do have side frictional effects which must be taken into account when designing the drilled piers. The diameter and length of the pier must be balanced so that the appropriate load carrying capacity is developed while maintaining enough minimum pressure to prevent upward movement of the piers as a result

of expansive action. The grade beam would span from pier to pier and be continually voided between these bearing points.

- 3) A balanced pad and grade beam type of foundation system would form the third general foundation option. This alternative would involve the use of small bearing pads beneath a reinforced concrete grade beam. The grade beam would be continually voided between pads with the foundation loads being transferred by the pads only, and not the grade beam between pads. Such a foundation system would be appropriate in parcel 60 where shale is at or very close to footings either because of the shallow depth to the shale (as at Test Hole No. 3) or due to planned basement construction. This configuration generally allows the designer to maintain a fairly high minimum dead load pressure.
- 4) The final foundation configuration would essentially be a combination of one of the preceding alternatives in conjunction with an overexcavated, compacted, granular pad. The depth of overexcavation would be related to the expansion potential of the clays as well as the nature of the residential units. Typical depths of overexcavation should range from about 2 to 5 feet. After overexcavation, a compacted granular pad using non-expansive, non-free draining soils could be constructed, maintaining a minimum of 95% of the soils standard maximum Proctor dry density, ASTM D-698. The purpose of this compacted pad is not to entirely overcome the expansive potential of the clays, but rather to provide a "buffer" zone between the clays and the foundations. A designed foundation system, similar to one of the preceding alternatives, would then be constructed on top of the granular pad. Frequent density tests would be required during pad construction to ensure that an adequate density level is being maintained. This option would also be used if any areas of uncontrolled fill are encountered during the excavation process.

If it is desirable to design the foundation systems for several standard model residences which are planned for this development, some preliminary design parameters could be used. Based upon the results of our exploration program, it would appear that the engineering characteristics of the soils encountered during drilling can be divided into alluvial soil and shale for purposes of preliminary design.

<u>Type Of Bearing Material</u>	<u>Allowable (Presumptive Design) Pressures, Psf</u>		<u>Foundation Types</u>
	<u>Maximum</u>	<u>Minimum</u>	
	Alluvial Soils	2,000	
Shale	5,000	2,100	Options 3 or 4
Shale	10,000	2,100	Option 2

These design values should be interpreted as preliminary in nature only. The open foundation excavation should be inspected to precisely determine the design parameters for each particular lot.

Regardless of the foundation type used, it is recommended that the foundation components be balanced to lower the possibility of differential movement. This balancing will help the buildings move more or less as single units, rather than in a differential manner. The foundation system should be proportioned such that the pressure on

the soil is approximately the same throughout the building. The judicious use of voids beneath very light walls will help balance the structure, as well as to develop the minimum design pressures dictated by the expansive clays. Using the criterion of dead load plus approximately one-half the live load, the contact pressures should be balanced to within +300 psf beneath all load bearing walls throughout the residential units. For the sandier soils, isolated interior column pads should be designed for pressures of slightly less than the average selected for the bearing walls. On the clays, isolated pads should be designed for pressures of slightly more than the exterior wall average. Using whichever criterion is applicable, we would recommend balancing these internal pads on pressures of approximately 150 psf more or less than the average of the exterior walls.

To help ensure that the structure moves more or less as a single unit rather than in a differential manner, we would recommend that all stem walls be supported by a grade beam capable of spanning at least 15 feet. This grade beam would apply to both interior and exterior load bearing walls. Such a grade beam should be horizontally reinforced continuously around the structure with no gaps or breaks

in reinforcing steel unless they are specially designed.

Beams should be reinforced at both the top and the bottom with the major reinforcement being at the top. All interior bearing walls should rest on a grade beam and foundation system of their own and should not be allowed to rest on a thickened slab section or "shovel" footing.

A reinforced concrete grade beam is recommended to carry the exterior wall loads in conjunction with the aforementioned drilled pier or pad and grade beam foundation alternatives. This grade beam should be designed to extend from bearing point to bearing point and should not be allowed to rest upon the ground surface between these two points. In the case of very long spans (25-foot or greater), the grade beam could be designed to only span half the distance between the bearing points with some load transfer being allowed near mid-span. In all cases, the grade beam should be horizontally reinforced continuously around the structure with no gaps or breaks in the reinforcing steel unless they are specially designed. Beams should be reinforced at both the top and the bottom with major reinforcement in all cases being placed in the bottom of the structure.

Where the stem walls are relatively shallow, vertical reinforcing will probably not be necessary.

However, where the walls retain soil in excess of about 5 feet in height, vertical reinforcing may be necessary to resist the active pressure of the soils along the wall exterior. To aid in designing such vertical reinforcing, the following equivalent fluid pressures can be utilized:

35 pcf for well-drained granular backfill from offsite borrow

45 pcf for native (onsite borrow) materials

It should be noted that the above values should be modified to take into account any surcharge loads applied at the top of the walls as a result of stored goods, live loads on the floor, machinery, or any other externally applied forces. The above equivalent fluid pressures should also be modified for the effects of any free water table.

The bottom of all foundation components should rest a minimum of $1\frac{1}{2}$ feet below finished grade or as required by the local building codes. Foundation components must not be placed on frozen soils.

All floor slabs on grade must be constructed to act independently of the other structural portions of the building. These floor slabs should contain deep construction or contraction joints to facilitate even breakage and to help minimize any unsightly cracking which could result from

differential movement. Floor slabs on grade should be placed in sections no greater than 25 feet on a side. Prior to constructing slabs on grade, all existing topsoil and organics must be removed from the building interior. Likewise, all foundations must penetrate the topsoil layer. On the more expansive materials, particularly shale, we suggest using at least 12 inches of drained granular fill to help mitigate the possible effects of soil expansion.

Where floor slabs are used, they may be placed directly on grade or over a compacted gravel blanket of 4 to 6 inches in thickness. Under no circumstances should this gravel pad be allowed to act as a water trap beneath the floor slab. A vapor barrier is recommended beneath any and all floor slabs on grade which will lie below the finished exterior ground surface. All fill placed beneath the interior floor slabs must be compacted to at least 90% of its maximum Proctor dry density, ASTM D-698.

Any interior, non-load bearing partitions which will be constructed to rest on the floor slab should be constructed with a minimum space of $1\frac{1}{2}$ inches (2 inches where the slab is within 2 feet of the much more expansive Mancos Shale) at either the top or bottom of the wall. The

bottom of the wall would be the preferred location for this space. This space will allow for any future potential expansion of the subgrade soils and will prevent damage to the wall and/or roof section above which could be caused by this movement.

Adequate drainage must be provided in the foundation area both during and after construction to prevent the ponding of water. The ground surface around the building should be graded so that surface water will be carried quickly away from the structure. The minimum gradient within 10 feet of the building will depend upon surface landscaping. Bare or paved areas should maintain a minimum gradient of 2%, while landscaped areas should maintain a minimum gradient of 5%. Roof drains must be carried across all backfilled areas and discharged well away from the structure.

The existing drainage in the area must either be maintained or improved. Water should be drained away from the structures as rapidly as possible and should not be allowed to stand or pond in the area of the buildings. The surface drainage across the entire property must be carefully controlled to prevent the infiltration and saturation of the foundation soils. All backfill around the buildings should be

compacted to a minimum of 90% of its maximum Proctor dry density, ASTM D-698. Roof drains must be carried across all backfilled regions and discharge well away from the structure.

A subsurface peripheral drain, including an adequate gravel collector, sand filter and perforated drain pipe, should be constructed around the outside of the building at foundation level. Dry wells should not be used anywhere on this site. The discharge pipe should be given a free gravity outlet to the ground surface. If "daylight" is not available, a sealed sump and pump should be used.

The recommendations pertaining to backfill, drainage, floor slab construction, etc., given in conjunction with the shallow foundation alternative would also apply to the drilled pier alternative.

Due to the lower density, wet condition of the soil materials encountered at parcel 61 and parts of parcel 60, construction of basements may be difficult and dewatering techniques may be necessary during construction. Additionally, problems with basement foundations may be encountered during periods of strong seepage due to uplift against the foundation and the possibility of seepage into the basement. While we would not entirely recommend against the construction of basements on this site, it is strongly recommended

that basement or half basement foundations be well sealed and that they be provided with the peripheral drains and underslab drainage layers described in this report. It is extremely important that the subsurface drains be properly installed and in good working order.

Samples of the soil in the paved areas have been evaluated using the Hveem-Carmany method to determine their support characteristics. These soils were found to have a Hveem (R) value of 5. This would indicate that a pavement section consisting of 2 inches of asphaltic concrete surfacing overlying 9½ inches of compacted aggregate base would be adequate. This design is based upon assumed traffic values. If accurate traffic data is available, some modification of these numbers may be required. All base and fill in the parking areas should be compacted to at least 90% of its modified maximum Proctor dry density (ASTM D-1557).

No major difficulties are anticipated in the course of excavating into the surficial site soils that consist of moderate to low density, fine grained soils. The upper few feet of the shale can generally be excavated by conventional methods due to its weathered state. Penetration of more than 4 to 6 feet into formational material could require

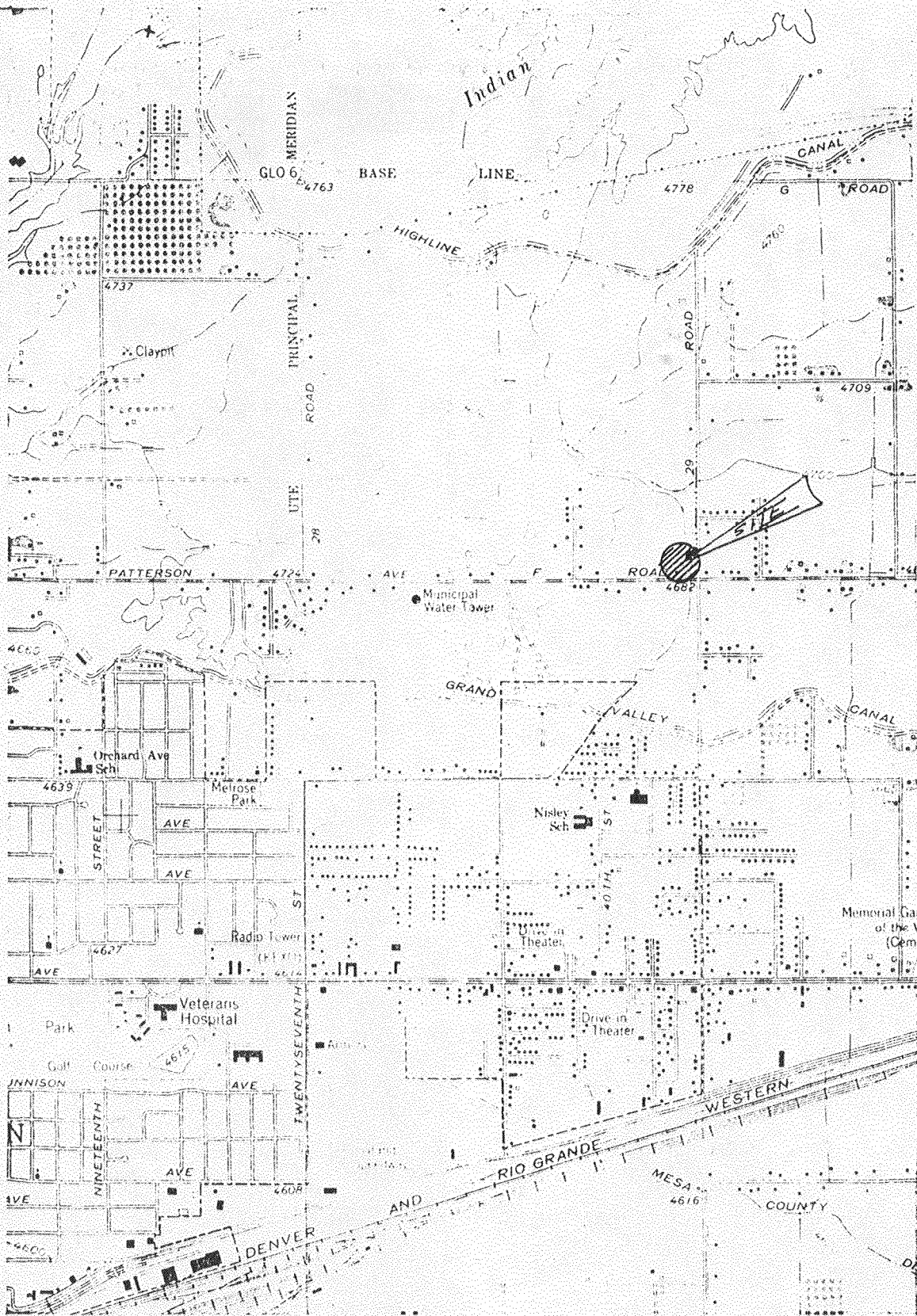
using "ripping" methods. Because alluvial soils such as were encountered in this investigation typically cave or slough from the sides of deeper excavations, it is possible that some safety provisions such as the sloping or bracing of the sides of excavation over 5 feet deep could be necessary. Any such safety provisions should conform to reasonable industry safety practices and applicable OSHA regulations.

The soils on this site were found to contain sulfates in detrimental quantities. Therefore, a Type II Cement would be recommended in all concrete in contact with the soil. Under no circumstances should calcium chloride ever be added to a Type II Cement. In the event that Type II Cement is difficult to obtain, a Type I Cement may be used, but only if it is protected from the soils by an impermeable membrane.

The open foundation excavation must be inspected prior to the placing of forms and pouring of concrete to establish that adequate design bearing materials have been reached and that no debris, soft spots or areas of unusually low density are located within the foundation region. All fill placed below the foundations must be fully controlled and tested to ensure that adequate densification has occurred.

It is extremely important due to the nature of data obtained by the random sampling of such a heterogeneous material as soil that we be informed of any changes in the subsurface conditions observed during construction from those outlined in the body of this report. Construction personnel should be made familiar with the contents of this report and instructed to relate any differences immediately if encountered.

It is believed that all pertinent points concerning the subsurface soils on this site have been covered in this report. If questions arise or further information is required, please feel free to contact Lincoln-DeVore at any time.



NORTH
SCALE: 1" = 2000'

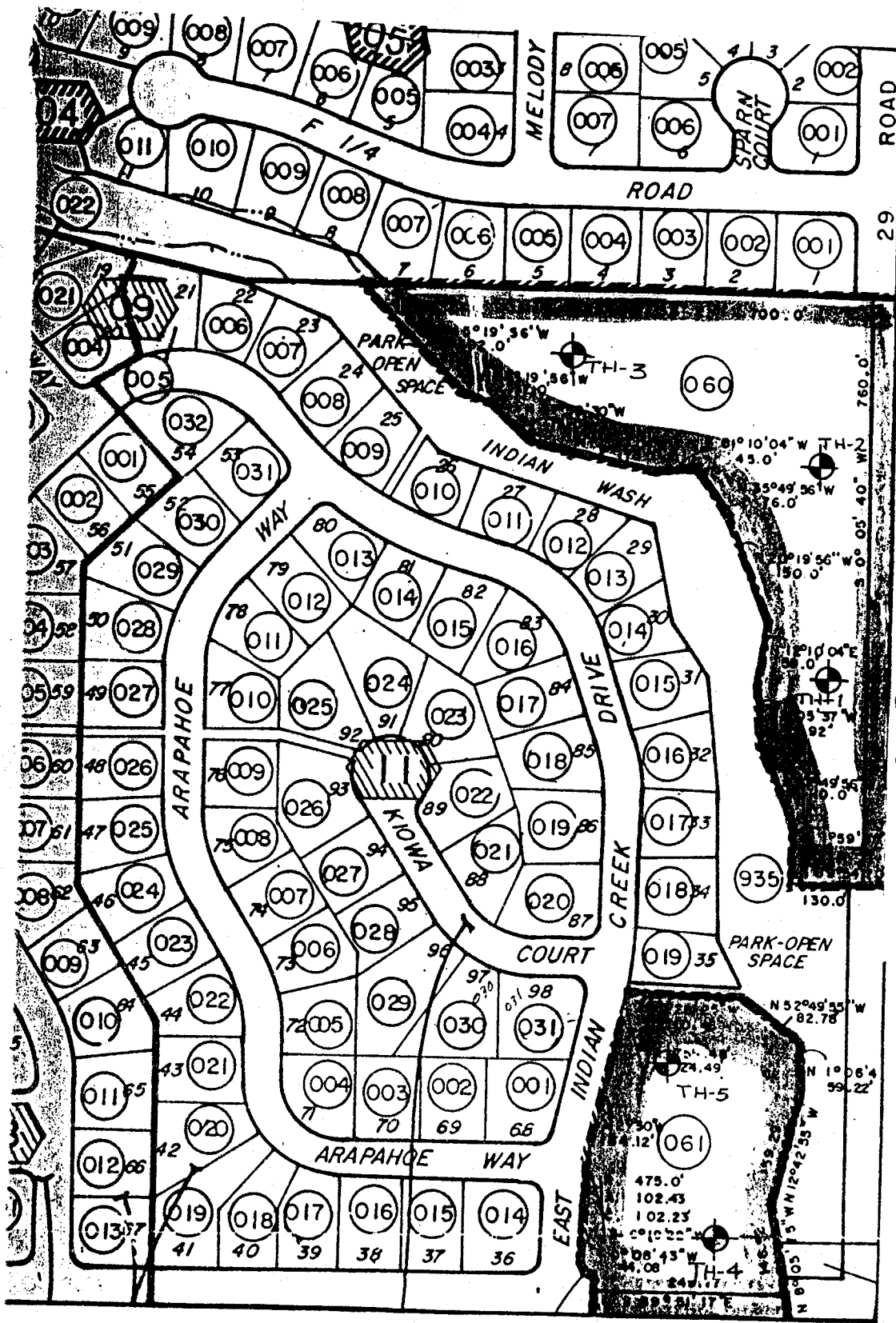
LDTL #42187J

GENERAL SITE LOCATION - RUSTY SUN

SUB - INDIAN VILL. LOTS 60 & 61 - GRAND JCT., COLO

L LINCOLN
DevORE
ENGINEERS-
GEOLOGISTS

COLORADO: COLORADO SPRINGS
PUEBLO, GLENWOOD SPRINGS,
GRAND JUNCTION, MONTROSE
WYOMING: ROCK SPRINGS



F ROAD

LD7L 421B7 J

SOIL BORING LOGS - RUSTY SUN - PARCELS 60
 #61 OF INDIAN VILLAGE SUB. - GRAND JCT., COLO

L LINCOLN
 DEVORE
 ENGINEERS-
 GEOLOGISTS

COLORADO: COLORADO SPRINGS,
 PUEBLO, GLENWOOD SPRINGS,
 GRAND JUNCTION, MONTROSE,
 WYOMING: ROCK SPRINGS

SOILS DESCRIPTIONS:

SYMBOL	USCS	DESCRIPTION
		Topsoil
		Man-made Fill
	GW	Well-graded Gravel
	GP	Poorly-graded Gravel
	GM	Silty Gravel
	GC	Clayey Gravel
	SW	Well-graded Sand
	SP	Poorly-graded Sand
	SM	Silty Sand
	SC	Clayey Sand
	ML	Low-plasticity Silt
	CL	Low-plasticity Clay
	OL	Low-plasticity Organic Silt and Clay
	MH	High-plasticity Silt
	CH	High-plasticity Clay
	OH	High-plasticity Organic Clay
	Pt	Peat
	GW/GM	Well-graded Gravel, Silty
	GW/GC	Well-graded Gravel, Clayey
	GP/GM	Poorly-graded Gravel, Silty
	GP/GC	Poorly-graded Gravel, Clayey
	GM/GC	Silty Gravel, Clayey
	GC/GM	Clayey Gravel, Silty
	SW/SM	Well-graded Sand, Silty
	SW/SC	Well-graded Sand, Clayey
	SP/SM	Poorly-graded Sand, Silty
	SP/SC	Poorly-graded Sand, Clayey
	SM/SC	Silty Sand, Clayey
	SC/SM	Clayey Sand, Silty
	CL/ML	Silty Clay

ROCK DESCRIPTIONS:

SYMBOL	DESCRIPTION
<u>SEDIMENTARY ROCKS</u>	
	CONGLOMERATE
	SANDSTONE
	SILTSTONE
	SHALE
	CLAYSTONE
	COAL
	LIMESTONE
	DOLOMITE
	MARLSTONE
	GYPSUM
<u>IGNEOUS ROCKS</u>	
	GRANITIC ROCKS
	DIORITIC ROCKS
	GABBRO
	RHYOLITE
	ANDESITE
	BASALT
	TUFF & ASH FLOWS
	BRECCIA & Other Volcanics
	Other Igneous Rocks
<u>METAMORPHIC ROCKS</u>	
	GNEISS
	SCHIST
	PHYLLITE
	SLATE
	METAQUARTZITE
	MARBLE
	HORNFELS
	SERPENTINE
	Other Metamorphic Rocks

SYMBOLS & NOTES:

SYMBOL	DESCRIPTION
	9/12 Standard penetration drive Numbers indicate 9 blows to drive the spoon 12" into ground.
	ST 2-1/2" Shelby thin wall sample
	W ₀ Natural Moisture Content
	W _x Weathered Material
	Free water table
	γ ₀ Natural dry density
	T.B. - Disturbed Bulk Sample
	② Soil type related to samples in report
	15' W _x Form. Top of formation
	Test Boring Location
	Test Pit Location
	Seismic or Resistivity Station. Lienation indicates approx. length & orientation of spread (S = Seismic, R = Resistivity)

Standard Penetration Drives are made by driving a standard 1.4" split spoon sampler into the ground by dropping a 140 lb. weight 30". ASTM test des. D-1586.

Samples may be bulk, standard split spoon (both disturbed) or 2-1/2" I.D. thin wall ("undisturbed") Shelby tube samples. See log for type.

The boring logs show subsurface conditions at the dates and locations shown, and it is not warranted that they are representative of subsurface conditions at other locations and times.

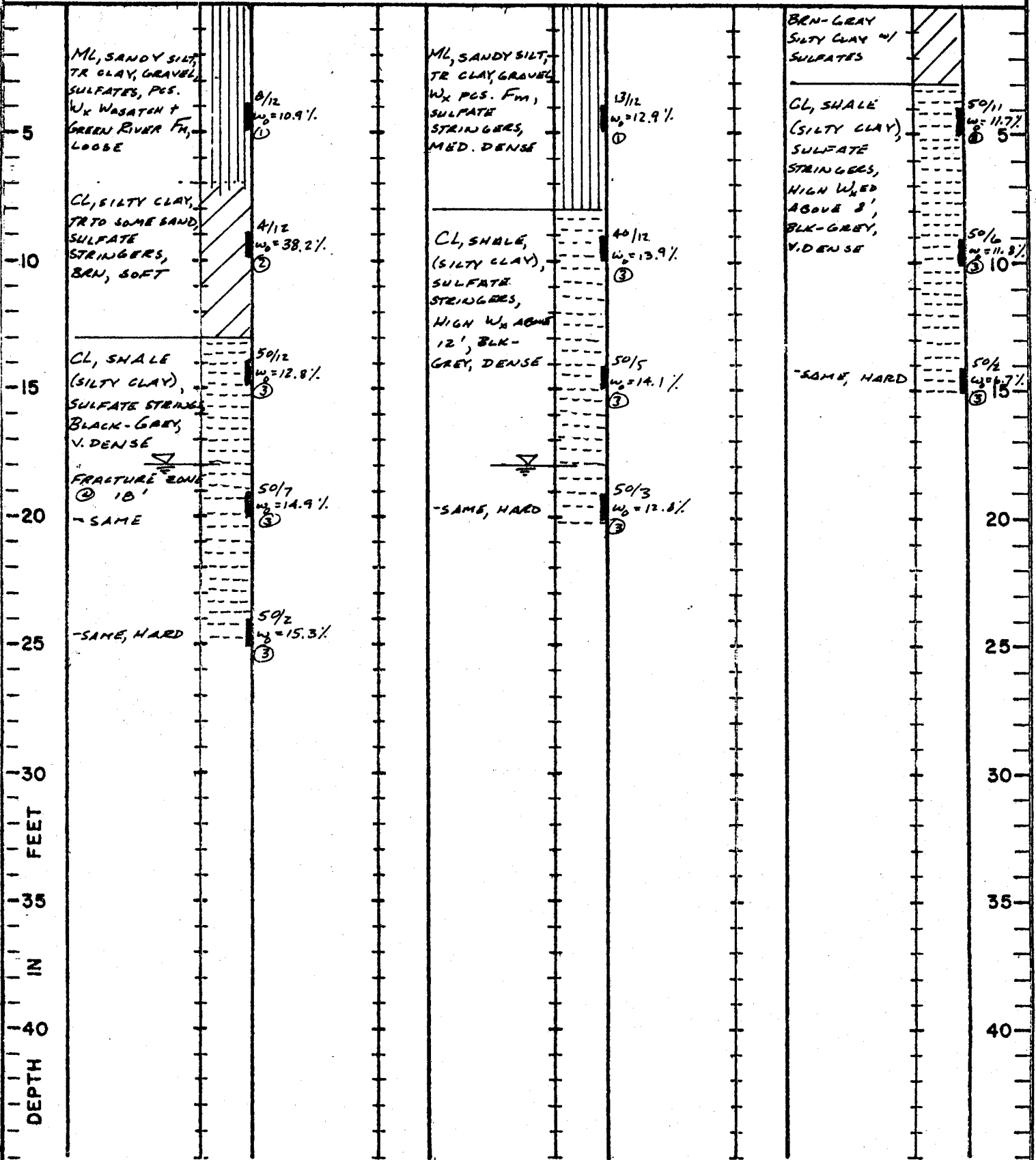
LINCOLN DeVORE TESTING LABORATORY
 COLORADO: Colorado Springs, Pueblo, Glenwood Springs, Montrose, Gunnison, Grand Junction. - WYO. - Rock Springs

EXPLANATION OF BOREHOLE LOGS AND LOCATION DIAGRAMS

TEST HOLE NO. 1
TOP ELEVATION

2

3



DRILLING LOGS

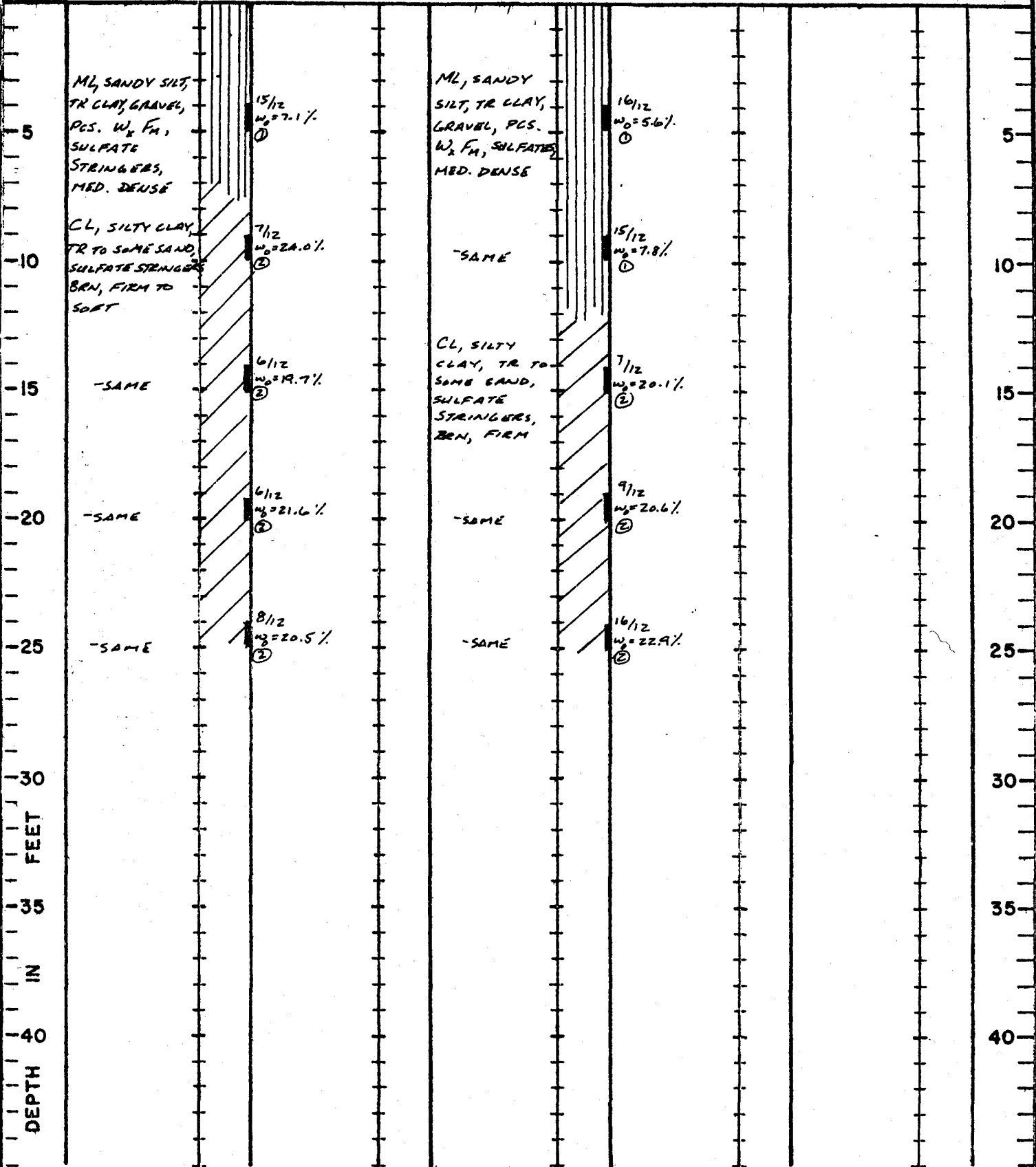


LINCOLN
DeVORE
ENGINEERS-
GEOLOGISTS

COLORADO: COLORADO SPRINGS,
PUEBLO, GLENWOOD SPRINGS,
GRAND JUNCTION, MONTROSE,
WYOMING: ROCK SPRINGS

TEST HOLE NO. 4
TOP ELEVATION

5



DRILLING LOGS

L LINCOLN
DeVORE
ENGINEERS
GEOLOGISTS

COLORADO: COLORADO SPRINGS,
PUEBLO, GLENWOOD SPRINGS,
GRAND JUNCTION, MONTROSE,
WYOMING: ROCK SPRINGS

SUMMARY SHEET

Soil Sample ML SANDY SILT-TR CLAY Test No. 42187 J
 Location PARCELS 60 + 61 - INDIAN VILLAGE - GRAND JET, COLO. Date 12-24-81
 Boring No. _____ Depth _____
 Sample No. 1 Test by DOS

Natural Water Content (w) _____ %
 Specific Gravity (Gs) _____ In Place Density (ρ_o) _____ pcf

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	_____
1"	_____
3/4"	_____
1/2"	_____
4	100.0
10	98.0
20	94.6
40	91.2
100	79.0
200	57.8

HYDROMETER ANALYSIS:

Grain size (mm)	%
0.02	25.5
0.005	3.6
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Plastic Limit P.L. 19.2 %
 Liquid Limit L. L. 22.0 %
 Plasticity Index P.I. 2.8 %
 Shrinkage Limit _____ %
 Flow Index _____
 Shrinkage Ratio _____ %
 Volumetric Change _____ %
 Lineal Shrinkage _____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - w_o _____ %
 Maximum Dry Density - ρ_d _____ pcf
 California Bearing Ratio (av) _____ %
 Swell: _____ Days _____ %
 Swell against _____ psf w_o gain _____ %

BEARING:

Housel Penetrometer (av) _____ psf
 Unconfined Compression (qu) _____ psf
 Plate Bearing: _____ psf
 Inches Settlement _____
 Consolidation % under _____ psf

PERMEABILITY:

K (at 20°C) _____
 Void Ratio _____
 Sulfates _____ ppm.

SOIL ANALYSIS

**LINCOLN-DeVORE TESTING LABORATORY
 COLORADO SPRINGS, COLORADO**

SUMMARY SHEET

Soil Sample CL SILTY CLAY - TR TO SOME SAND Test No. 42187J

Location PARCEL 60 + 61 - INDIAN VILLAGE - GRAND JET, COLO. Date 12-29-81

Boring No. _____ Depth _____

Sample No. 2 Test by RKL

Natural Water Content (w) _____ %

Specific Gravity (Gs) _____ In Place Density (ρ_o) _____ pcf

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	_____
1"	_____
3/4"	_____
1/2"	100.0
4	99.3
10	99.0
20	98.7
40	98.1
100	96.0
200	82.4

HYDROMETER ANALYSIS:

Grain size (mm)	%
0.02	54.9
0.005	33.3
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Plastic Limit P.L. 20.3 %
 Liquid Limit L.L. 29.4 %
 Plasticity Index P.I. 9.1 %
 Shrinkage Limit _____ %
 Flow Index _____
 Shrinkage Ratio _____ %
 Volumetric Change _____ %
 Lineal Shrinkage _____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - w_o _____ %
 Maximum Dry Density - ρ_d _____ pcf
 California Bearing Ratio (av) _____ %
 Swell: _____ Days _____ %
 Swell against 2065 psf w_o gain 16.2 %

BEARING:

Housel Penetrometer (av) _____ psf
 Unconfined Compression (qu) _____ psf
 Plate Bearing: _____ psf
 Inches Settlement _____
 Consolidation % under _____ psf

PERMEABILITY:

K (at 20°C) _____
 Void Ratio _____
 Sulfates _____ ppm.

SOIL ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
COLORADO SPRINGS, COLORADO

SUMMARY SHEET

Soil Sample CL - SHALE (SILTY CLAY-TR SAND) Test No. 421B7 J

Location PARCELS 60 + 61 - INDIAN VILLAGE - GRAND JCT., Colo. Date 12-29-81

Boring No. _____ Depth _____

Sample No. 3 Test by RKL

Natural Water Content (w) _____ %
 Specific Gravity (Gs) _____ In Place Density (ρ_o) _____ pcf

SIEVE ANALYSIS:

Sieve No.	% Passing
1 1/2"	_____
1"	_____
3/4"	_____
1/2"	_____
4	100.0
10	99.8
20	99.6
40	99.4
100	97.9
200	93.8

HYDROMETER ANALYSIS:

Grain size (mm)	%
0.02	91.4
0.005	71.6
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Plastic Limit P.L. 25.5 %
 Liquid Limit L.L. 38.4 %
 Plasticity Index P.I. 12.9 %
 Shrinkage Limit _____ %
 Flow Index _____
 Shrinkage Ratio _____ %
 Volumetric Change _____ %
 Lineal Shrinkage _____ %

MOISTURE DENSITY: ASTM METHOD

Optimum Moisture Content - w_o _____ %
 Maximum Dry Density - ρ_d _____ pcf
 California Bearing Ratio (av) _____ %
 Swell: _____ Days _____ %
 Swell against 2110 psf w_o gain 17.0 %

BEARING:

Housel Penetrometer (av) _____ psf
 Unconfined Compression (qu) _____ psf
 Plate Bearing: _____ psf
 Inches Settlement _____
 Consolidation % under _____ psf

PERMEABILITY:

K (at 20°C) _____
 Void Ratio _____
 Sulfates _____ ppm.

SOIL ANALYSIS

LINCOLN-DeVORE TESTING LABORATORY
 COLORADO SPRINGS, COLORADO

CITY OF GRAND JUNCTION IMPROVEMENTS AGREEMENT

In re: RUSTY SUN FILING ONE N.W. Corner 29th & Patterson
 Name of subdivision or other improvement location Rd.

Intending to be legally bound, the undersigned subdivider hereby agrees to provide throughout this subdivision and as shown on the subdivision plat of _____ date _____ 19____, the

name of subdivision following improvements to City of Grand Junction standards and to furnish an Improvements Guarantee in the form acceptable to the City for these improvements.

Improvements	Quantity and Unit Costs	Estimated Cost	Estimated Completion Date
Street grading	DNA		
Street base	"		
Street paving	"		
Curbs and Gutters	"		
Sidewalks	"		
Storm Sewer facilities	"		
Sanitary sewers	6 manholes @ \$750	4500-	July 1983
Mains	490 l.f. @ \$10	4900-	"
Laterals or house connections	20 lots @ \$150	3000-	"
On-site sewage treatment	DNA		
Water mains	408 l.f. @ \$12	4896-	"
Fire hydrants	1 @ \$1200	1200-	"
On-site water supply	DNA		
Survey monuments	"		
Street lights	"		
Street name signs	"		
SUB TOTAL		18,496-	

Supervision of all installations (should normally not exceed 4% of subtotal)
\$ 740-

TOTAL ESTIMATED COST OF IMPROVEMENTS AND SUPERVISION \$ 19,236.00

The above improvements will be constructed in accordance with the specifications and requirements of the City or appropriate utility agency and in accordance with detailed construction plans based on the City Council approved plan and submitted to the City Engineer for review and approval prior to start of construction. The improvements will be constructed in reasonable conformance with the time schedule shown above. An Improvements Guarantee will be furnished to the City prior to recording of the subdivision plat.

 Signature of subdivider

(If corporation, to be signed by President and attested to by Secretary, together with the corporate seal.)

Date: _____ 19____.

I have reviewed the estimated costs and time schedule shown above and based on the plan layouts submitted to date and the current costs of construction I take no exception to the above.

 City Engineer

Date: _____ 19____.

CITY OF GRAND JUNCTION IMPROVEMENTS AGREEMENT

In re: RUSTY SUN FILING ONE N.W. CORNER 29 & PATTERSON RDS.
 Name of subdivision or other improvement location

Intending to be legally bound, the undersigned subdivider hereby agrees to provide throughout this subdivision and as shown on the subdivision plat of _____ date _____ 19____, the name of subdivision

following improvements to City of Grand Junction standards and to furnish an Improvements Guarantee in the form acceptable to the City for these improvements.

Improvements	Quantity and Unit Costs	Estimated Cost	Estimated Completion Date
Street grading	NA		
Street base	"		
Street paving	"		
Curbs and Gutters	"		
Sidewalks	"		
Storm Sewer facilities	"		
Sanitary sewers	Manholes a 750	3750	July 1983
Mains	480 I.S. a 10"	4800	"
Laterals or house connections	16 a 150	2400	"
On-site sewage treatment	NA		
Water mains	550 I.F. a 12"	6600	"
Fire hydrants	2 a 1200	2400	"
On-site water supply	NA		
Survey monuments	"		
Street lights	"		
Street name signs	"		
SUB TOTAL		19,950	

Supervision of all installations (should normally not exceed 4% of subtotal)
\$ 800

TOTAL ESTIMATED COST OF IMPROVEMENTS AND SUPERVISION \$ 20,750

The above improvements will be constructed in accordance with the specifications and requirements of the City or appropriate utility agency and in accordance with detailed construction plans based on the City Council approved plan and submitted to the City Engineer for review and approval prior to start of construction. The improvements will be constructed in reasonable conformance with the time schedule shown above. An Improvements Guarantee will be furnished to the City prior to recording of the subdivision plat.

 Signature of subdivider

(If corporation, to be signed by President and attested to by Secretary, together with the corporate seal.)

Date: _____ 19____.

I have reviewed the estimated costs and time schedule shown above and based on the plan layouts submitted to date and the current costs of construction I take no exception to the above.

 City Engineer

Date: _____ 19____

CITY OF GRAND JUNCTION IMPROVEMENTS AGREEMENT

In re: RUSTY SUN N.W. Corner 2900 & Patterson
 Name of subdivision or other improvement location ca

Intending to be legally bound, the undersigned subdivider hereby agrees to provide throughout this subdivision and as shown on the subdivision plat of RUSTY SUN SUBDIVISION date 8-31 1981, the name of subdivision following improvements to City of Grand Junction standards and to furnish an Improvements Guarantee in the form acceptable to the City for these improvements.

700 20100

1045

Improvements	Quantity and Unit Costs	Estimated Cost	Estimated Completion Date
Street grading <u>PATTERSON</u>			
Street base <u>8</u>			
Street paving <u>2900 S</u>	1085 L.F. @ \$30	\$32,550	1983
Curbs and Gutters			
Sidewalks			
Storm Sewer facilities			
Sanitary sewers			
Mains	1045 L.F. @ \$10	\$10,450	"
Laterals or house connections			
On-site sewage treatment			
Water mains	1560 L.F. @ \$12	\$18,720	"
Fire hydrants	5 @ \$1400	\$7,000	"
On-site water supply			
Survey monuments			
Street lights			
Street name signs			
SUB TOTAL		\$72,720	

Supervision of all installations (should normally not exceed 4% of subtotal) \$2910

TOTAL ESTIMATED COST OF IMPROVEMENTS AND SUPERVISION \$ 75,630

The above improvements will be constructed in accordance with the specifications and requirements of the City or appropriate utility agency and in accordance with detailed construction plans based on the City Council approved plan and submitted to the City Engineer for review and approval prior to start of construction. The improvements will be constructed in reasonable conformance with the time schedule shown above. An Improvements Guarantee will be furnished to the City prior to recording of the subdivision plat.

Signature of subdivider

(If corporation, to be signed by President and attested to by Secretary, together with the corporate seal.)

Date: _____ 19____.

I have reviewed the estimated costs and time schedule shown above and based on the plan layouts submitted to date and the current costs of construction I take no exception to the above.

City Engineer

Date: _____ 19____.

REVIEW SHEET SUMMARY

FILE NO. 85-81 **DUE DATE** 9/14/81
ACTIVITY Rusty Sun Subdivision
PHASE Preliminary Plan & Annexation to PR 8.4 **ACRES** _____
LOCATION NW corner 29 Rd. & F Rd.
PETITIONER Sego Services c/o Jim Lindell
PETITIONER ADDRESS 842 25 Road, Grand Junction, CO 81501
ENGINEER Paragon Engineering, Inc.

OVERALL CONSIDERATIONS

- OVERALL COMPATABILITY**
- CONSISTENCY**
- ADJACENT PROPERTY**
- CHANGE IN THE AREA**
- TRAFFIC IMPACT**

Surrounded by County R-2 built out to approximate 4 units to an acre on North & West side. Vacant land existing on South and East. Impact on the intersection 29 & Patterson Rd. is a major consideration, not just for this proposal but all development in this area. It is a change to higher density from what is existing. This is an annexation, serviced by Ute Water and City services, creating additional impact on the city itself.

OBSERVATION HERE SIN /
 OBSERVATION HERE SIN SIN

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
9/8/81	City Parks & Rec.	No comment.
9/8/81	Floodplain Admin. County	No flood hazard assessment and the influence of the flood hazard on this development was submitted. Grading & drainage plan states under Drainage Notes, that this development isn't located in a flood hazard area. Contrary to the drainage notes, the preliminary plan shows units to be located within the existing drainage channel and a floodplain permit will be required. What is the situation? Preliminary plan submittal must include a flood hazard assessment. Recommend no further action on this until flood hazard is assessed and preliminary plan is clarified.
9/10/81	City Police	This development will create additional vehicles at 29 Rd. intersection with additional accidents likely. Need additional information on security lighting outside.
9/10/81	Comprehensive Planning	Re: Impact statement - character of immediate neighborhood has not changed significantly to warrant a density of 8.4 units per acre. All surrounding zoning and densities have 4 units per acre or less. A reduction in density to conform with the existing developments would be more acceptable.
9/11/81	G.J. Drainage	Drain parallel with 29 Road along east boundary must be tiled with 24" concrete pipe. Contact this office for detail.

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
9/11/81	Ute Water	No objections to Preliminary Plan. Existing water systems indicated on the plan are correct. All on-site water lines greater than 4" will be Class 150 AC pipe installed to Ute Water specifications. No water line will be installed in common or landscaped areas when they could be placed in street or roadways. This correction requirement for the 6" line serving that section North of Patterson & West of Indian Wash and the 6" line at the North access to 29 Road must be indicated on the FINAL presentation for UCC Sign-off. Detailed water line construction drawings must include all valves, service lines, proposed meter locations, and typical detail blow ups, and must be submitted to Ute Water for review and approval prior to construction. Policies and fees in effect at the time of application will apply.
9/14/81	Mountain Bell	Mountain Bell will utilize open space and street easements for placement of utilities.
9/14/81	Floodplain Admin. City	Due to the indication of regrading of the channel, a floodplain analysis will be required to show the effects of both up and down stream prior to preliminary approval. A floodplain permit will be required prior to any construction. All construction will have to conform to Grand Junction Floodplain regulations. Also there are indications of bridges (pedestrian?) across the wash, thus size, dimensions etc. of piping, channel, modifications is required and will need to be approved by the appropriate agencies prior to final approval. May be required to go thru 404 permit process.
9/14/81	City Fire	Hydrant locations as shown on utility plan are ok. The water line on development off 29 Rd. to be 8". The looped 6" line off East Indian Creek is OK. We will need address system on buildings. Hydrants will have to be installed before construction starts on the different phases. Fire flow will be required. This office has no objections to preliminary plan and rezone, if above conditions are met.
9/14/81	City Engineer	I am not sure if the street improvements shown at 29 & F Roads fit Mesa County's proposed intersection improvements. I assume a power of attorney will be granted for that portion of 29 Road which is not improved as part of the intersection and that the property will be assessed for the 29 & F Road intersection improvements. Access and internal traffic circulation look reasonable. Pedestrian circulation looks good. I assume an easement will be granted for Indian Wash as a public drainway. Internal sanitary sewer layout looks fine. These sewers should be 8 inch public sewers located in 20 ft. wide easements. Some of the buildings proposed are in the designated 100 year floodplain and a permit will be required. Hydraulic analysis of Indian Wash must accompany the permit application.
9/15/81	City Utilities LATE	None.
9/15/81	Transportation Engineer LATE	Developer should be aware of Mesa County's Plans for a raised median on Patterson Rd. that would preclude left turns from Indian Creek Dr. onto Patterson and would impact traffic flow in Indian Village.

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
9/15/81	Staff Comments	<ol style="list-style-type: none"> 1. Power of Attorney for ½ Street improvements on Patterson & 29 Road. 2. Does the petitioner intend to develop the County Park land. 3. Does the petitioner own Indian Village File 1 & 2? 4. Pedestrian circulation through the County Park land, has this been coordinated with County Parks and Rec. 5. Is the 6' wood fence along the northern property line a solid wood fence? 6. Need detail landscaping on County Park land. 7. Need elevation drawing of typical building. 8. Need to detail open space. 9. Need to detail traffic circulation. 10. 100 year floodplain needs to be designated. 11. Need detail amenities. 12. Need lighting detail. 13. Trash pick-up coordinated with Bill Reeves. 14. Bike racks? 15. Will parking be designated for individual units? 16. All parking areas to be striped & paved. 17. Any over flow parking? 18. Low profile bushes/growies at entries. 19. Fire access ok? 20. Will need floodplain analysis. 21. Will this be 2 separate filings or phasing involved? 22. Any covenants? 23. How will landscaping be maintained. 24. How about neighborhood input? <p>Project must obtain Building Permit within 1 year of approval or be scheduled for a rehearing.</p>
9/18/81	Public Service LATE	Electric & Gas: Private drives, open space and common area be designated as open space and utility easement. LLW 9/12/81 HT 9/16/81
9/21/81	County Parks LATE SIC	<p>Monies on him or property. We feel this should be under private open space.</p> <ol style="list-style-type: none"> 1) Too small and inaccessible. 2) More appropriate as private open space. 3) Wash needs to be improved in coordinate with drainage district, since more user access would be available.
9/21/81	Additional Staff Comments	<ol style="list-style-type: none"> 1) Half street improvements on 29 Road and Patterson Rd. should occur at the time of development. 2) What is the proposal to the drainage ditch that lies in the Right-Of-Way on 29 Rd.? It should match the existing pipe drainage to the north. 3) What is the intent of the petitioner to mitigate the intersection on 29 Rd. and Patterson Rd.? This proposal will impact it significant. 4) How is the proposed site going to drain? This information should have been submitted at preliminary, but shall be submitted at final. 5) Need a clarification of units that is proposed. In the impact statement it states that 46 units will access off of 29 Rd., 12 units access onto East Indian Creek Dr. and 12 units on East Indian Creek Rd and Patterson. These add up to 70 units as opposed to 62 units on the site plan. 6) Also impact statement says that 12 units will access into East Indian Creek Dr., but the plan doesn't show any.
9/29/81		<p>TRANSMEIER/DUNIVENT PASSED 3-2 (RINKER AND LITTLE AGAINST) A MOTION TO SUBMIT #85-81 PRELIMINARY PLAN, RUSTY SUNN SUBDIVISION, BY SEGO SERVICES/JIM LINDELL, LOCATED AT THE NORTHWEST CORNER OF 29 AND F ROADS, TO THE CITY COUNCIL FOR CONSIDERATION, WITH A RECOMMENDATION OF APPROVAL, SUBJECT TO STAFF COMMENTS.</p> <p>TRANSMEIER/DUNIVENT PASSED 3-2 (RINKER AND LITTLE AGAINST) A MOTION TO SUBMIT #85-81, ZONING OF RUSTY SUNN ANNEXATION TO PR 8-4 TO CITY COUNCIL FOR CONSIDERATION, WITH A RECOMMENDATION OF APPROVAL, SUBJECT TO STAFF COMMENTS.</p>

RESPONSE TO REVIEW SHEET COMMENTS

File No.: 85-81
Item: Rusty Sun Subdivision
Phase: Preliminary Plan and Annexation to PR8.4
Location: North West Corner 29 and Patterson Road

<u>Agency</u>	<u>Response</u>
City Parks and Recreation	Had no comment at this time.
County Flood Plain Administrator	<p>The submitted development plan does not lie within a flood hazard area as identified by the United States Army Corp of Engineers.</p> <p>Several of the units within the site were initially submitted lying within the 100 year flood plain. Referring to the subsequent plan shows some revisions that removes all residential structures and one pedestrian bridge from the 100 year flood plain limits due to the Indian Wash.</p> <p>Detailed flood hazard assessments will be submitted with a final development plan. This is due primarily to the nature of the planned unit development review process. Any changes made by review agencies or planning commission could result to changes in a submitted flood hazard assessment.</p>
City Police	City Police comments were informational in nature revolving around additional traffic at 29 and Patterson Roads. Petitioner will submit detailed information on security lighting with the Final Development Plan.
Comprehensive Planning	<p>The impact statement clearly indicates the changes of the immediate neighborhood. These include:</p> <ol style="list-style-type: none">1) The establishment and approval of the existing Indian Village, Darla Jean, and Karen Lee Subdivisions.2) The establishments and their approvals of multiple family zones within one half mile of radius of the site, including Sunrise Gardens, Pepperidge, and Wood-smoke.3) Sanitary sewer mains and domestic water mains have been extended into the area.4) 29 and Patterson Roads have been classified as major arterials.5) The establishment of a neighborhood commercial shopping center located South East of 29 and Patterson Roads.
Grand Junction Drainage	Drain ditch paralleling 29 Road will be abandoned and diverted to a point further North of its present discharge. As indicated on the submitted grading and drainage plan. Any tiling will be done with a 24" concrete pipe.
Ute Water	Ute water had no objections to the Preliminary Plan. The balance of their comments were informational in nature to be utilized in the preparation of the Final Construction Drawings.

<u>Agency</u>	<u>Response</u>
Mountain Bell	Comments were informational in nature.
City Flood Plain Administrator	Refer to response to comments previously stated to the County Flood Plain Administrator. Additionally, the southerly most bridge has been removed from the development plans.
City Fire	Had no objections to the Preliminary Plan and Rezoning and found the hydrant locations shown on the utility plan to be ok.
City Engineer	<p>The proposed street improvements shown on 29 and Patterson Roads, fit the Mesa County proposed intersection improvements.</p> <p>It is petitioners intention to construct the additional roadway requirements for 29 Road adjoining the site in question. The balance of 29 Road along the Wash will be part of the County street improvement plans for 1982.</p> <p>Easements will be granted for the drainage channels to the Indian Wash.</p> <p>Revised plan indicated that all buildings are removed from the designated 100 year flood plain.</p>
City Utilities	Had no comment.
Transportation Engineer	Petitioner is aware of Mesa County's plans for street intersection improvements to Patterson Road and 29 Road.
Public Service	Comments were informational in nature.
City Parks	It is the petitioner's desire to maintain the smaller open areas as private open space. It is the petitioner's intention to maintain the existing County Park as public lands. Further, to improve that area with a pedestrian walkway and removal of some of the vegetation, in particular, the under growth.
Planning Staff	<ol style="list-style-type: none"> 1) Petitioners are willing to do actual half street improvements adjoining subject property along Patterson and 29 Roads. 2) Petitioner intends to develop the public park land by installing a pedestrian walk way and general clean up, pruning and removal of undesirable vegetation. 3) The petitioner does not own Indian Village Filings one and two. Most lots within filings one and two have been sold and owned by numerous different individuals. 4) Pedestrian circulation through the park land was coordinated with the County Parks and Recreation at the time of the Indian Village approval several years ago. 5) The six foot wood screen fence along the Northerly property line is to be a solid cedar wood fence.

Agency

Response

Planning Staff Cont.

- 6) Landscaping on the public park land will consist of pruning and maintenance of existing trees and shrubbery presently located within the site.
- 7) Find attached elevation perspective drawing of a typical building.
- 8) Detailed landscaping plans will be provided with the Final Development Plan.
- 9) Traffic circulation can be found on the previously submitted Preliminary Development Plan.
- 10) The 100 year flood plain is designated on the submitted grading and drainage plan.
- 11) As previously stated, landscaping details will be submitted with the Final Development Plan.
- 12) Parking lot lighting as well as walk lighting details will be provided with the Final Development Plan.
- 13) The Final Development Plan will indicate the trash pick-up locations as coordinated with Bill Reeves.
- 14) Bike racks will not be provided within the development.
- 15) Parking will be designated for the individual units.
- 16) All parking areas will be striped and paved.
- 17) Overflow parking can be found adjacent to each individual unit.
- 18) Landscaping plan and final development will indicate low profile landscaping at entries.
- 19) Fire Department has indicated far access is ok.
- 20) Additional detailed flood plain analysis will be provided with the final plat and plan.
- 21) Final Development Plan will be submitted for the entire site .
- 22) Covenants, conditions and restrictions will be recorded with the Final Plat and Plan. These will be completed in accordance with suggested FHA VA guide lines.
- 23) Landscaping will be maintained by the Corporate Homeowners Association.
- 24) The Petitioner has met with the neighbors on an individual basis and received their input. Generally their input consists of a concern over the total number of units proposed.

Additional Staff Comments

- 1) It is the petitioner's intention to construct half street improvements on 29 Road and Patterson Roads adjoining the site in question during time of development.
- 2) The submitted grading and drainage plan shows that the drainage ditch that lies within the right-of-way of 29 Road will be foreshortened and discharged to the Indian Wash utilizing a 24" concrete pipe matching the existing drainage pipe to the north.
- 3) It should be pointed out that Mesa County has completed site development plans for major intersection improvements to 29 and Patterson Roads. This intersection includes signalization and total channalization.

Agency

Response

Additional Staff Comments Cont.

- Once this improvement is completed, additional traffic generated by this development could adequately be handled.
- 4) The submitted grading and drainage plan shows that the site draining at four various points along Indian Wash. Also, accompanying the submitted grading and drainage plan are detailed drainage calculations. Additional refined grading and drainage plans will be submitted with the Final Development Plan.
 - 5) Sixteen townhome units are planned to access East Indian Creek Drive. Forty-six townhome units are planned to access from 29 Road bringing the total requested units to sixty-two.

FF 000000 000000000000 **ction sheet**

Acres 7.43
 Units 62
 Density PR 8.4

rezone & preliminary plan

File No. 85-81
 Zone Annex-
 Tax Parcel Number _____

Activity Rusty Sunn - Zone of Annexation to PR 8.4
 Phase _____
 Common Location N.W. corner 29 Rd. & ~~E~~ Rd.

Date Submitted 9/1/81 Date Mailed Out 9/3/81 Date Posted 9/18/81 *called 9/16*
 _____ day Review Period Return by 9/14/81 MCC Information Sent _____

Date Adjacent Property Owners Notified of MCC/GJPC _____ Date Adjacent Property Owners Notified of MCC/CIC _____

review agencies	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	X	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG
Development Dept.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Road	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Health	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Surveyor	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Parks/Recreation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Engineer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Transportation Engineer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
City Engineer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
City Utilities	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
City Parks/Recreation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
City Police Dept.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
County Sheriff	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Floodplain Administration	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Comprehensive Planning	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
G.J. Dept. of Energy	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fire <u>City</u>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Irrigation <u>Highland/Price</u>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Drainage <u>ST</u>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Water (ute) Clifton)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Sewer <u>Central Grand V</u>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
G.V. Rural Power	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Mountain Bell	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Public Service (2 sets)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Soil Conservation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
State Highway Dept.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
State Geological	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
State Health Dept.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Transamerica	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Water & Power Resources	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Mack, Mesa, Collbran, Palisade, Fruita, DeBeque, G.J., Mesa Cnty.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
OTHER:	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
GJPC (7)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CC (3)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
client	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
totals	35	35	22	18	5	4	4	3	2	35	1	11	24	2																			

BOARDS

BOARD	DATE	REMARKS
GJPC	9/1/81	App'l - subject to review comments - pare look into 29 Rd & Patterson on Co & P analysis
CC	11/4/81	Zoning to PR 8.4 approved Reaction on plan
CC	1-6-82	Appr. per resolution of Indian Wash.

THIS ITEM IS IN THE PROCESS OF ANNEXATION TO THE CITY OF GRAND JUNCTION. PLEASE CONSIDER THIS PROJECT WITHIN THE CITY LIMITS, FOR REVIEW PURPOSES. (7)

9/1 Above stmt. was attached to review packets at time of old
 + need to sent copies to Co Parks & Rec.
 + need a new ownership deed.

City County Development Department

Open Space Dedication (acreage) _____ 50 C. S. Fee Required \$ _____ Paid Receipt # _____
 Recording Fee Required \$ _____ Paid (Date) _____ Date Recorded _____
 Date Resolution Mailed _____

REVIEW SHEET SUMMARY

FILE NO. 85-81 DUE DATE 2-15-82
 ACTIVITY Rusty Sun - Filing #1
 PHASE Final ACRES _____
 LOCATION NE corner of East Indian Creek Drive & Patterson
 PETITIONER Jim Lindell
 PETITIONER ADDRESS 843 25 Road
 ENGINEER Paragon

OVERALL CONSIDERATIONS

- | | |
|--|--|
| <input type="checkbox"/> <input type="checkbox"/> OVERALL COMPATABILITY
<input type="checkbox"/> <input type="checkbox"/> CONSISTENCY
<input type="checkbox"/> <input type="checkbox"/> ADJACENT PROPERTY
<input type="checkbox"/> <input type="checkbox"/> CHANGE IN THE AREA
<input type="checkbox"/> <input type="checkbox"/> TRAFFIC IMPACT | <ol style="list-style-type: none"> 1. Setbacks (min.) be shown on plat. 2. Parks issue needs to be resolved. 3. Some on street parking in question. 4. Is there adequate traffic movement in NE corner to prevent backing out into each other? 5. Any screening/buffering along north prop. line?, along Patterson? 6. Need max. hts. stated. (i.e. "not exceed (x) ft.) 7. Trash p/u coordinated with city sant. eng. 8. Any lighting proposed along the wash? 9. Any common access through filing #1 to the wash from the west to the east except along Patterson? (public/private?) 10. Fire access to units 6, 7, and 8 need to be checked. 11. Any change in covenants for park or other items in question? If so need amended copy. 12. Project must obtain building permit within 1 year of final approval or be scheduled for a rehearing. |
|--|--|

HAS NOT BEEN ADDRESSSED
 ADDRESS HERE WITH THIS

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
2/16/82	City Utilities	The City will not be able to provide trash pick-up on the portion of the driveway called Rusty Sun Court. There is no place for the trash truck to turn around. Pedestrians will have to walk in the private driveways. Will parking be allowed along the edge of the private driveways? If so it will be a problem for traffic circulation. Sewer taps are not allowed into manholes. Easements should be provide for sewer lines. City will not be responsible for repair of private driveways due to damage from heavy trash trucks and sewer maintenance vehicles. Ingress-Egress easements must be provided for trash service.
2/16/82	City Fire	This office will accept the final plans as submitted on second review on final plat plans Feb. 2, 1982.
2/16/82	City Police	We have no objections.
2/16/82	Ute Water	No objections to project. A direct communique will be sent to the engineer to correct minor discrepancies between the presentation and Ute specifications. Policies and fees in effect at the time of application will apply.
2/16/82	Transp. Engr.	20 degree parking on a street (even a "private" drive) is not very good, but is even worse on a curve. Rusty Sun Court is a dead end with no turn-around. Is it necessary for the south entrance onto E. Indian Creek Dr. be skewed?

85-81

Rusty Sun Filing One

2/15/82

<u>Date Rec.</u>	<u>Agency</u>	<u>Comments</u>
2/16/82	Floodplain Adm.	Because there will be development and possible modification to Indian Wash within a 100-year FP, a City Floodplain Permit will be required prior to any construction, modification or alteration of Indian Wash and Rusty Sun. A Floodplain Permit application can be picked up from the FP Adm. in the Development Dept. A \$40.00 FP Permit fee is required as well as FP analysis. This should be submitted prior to final plat recording and no building permits can be issued prior to securing the permit.

2/16/82 Mailed Summary
 2/19/82 Late - P.S.Co.
 " " Mtn. Bell
 2/23/82 Late Parks & Rec

3/5/82 GJPC Minutes
 of 2/23/82

MOTION: (COMMISSIONER LITTLE) "IN REGARD TO FILE #85-81, RUSTY SUN SUBDIVISION FILING #1, FINAL PLAT, I RECOMMEND THE FILE BE FORWARDED TO CITY COUNCIL WITH RECOMMENDATION FOR APPROVAL SUBJECT TO CONSIDERATIONS OF STAFF."

THE MOTION WAS SECONDED BY COMMISSIONER O'DWYER.

CHAIRWOMAN QUIMBY REPEATED THE MOTION AND CALLED FOR A VOTE.

THE MOTION WAS APPROVED BY A VOTE OF 5-1. (COMMISSIONER RINKER OPPOSED)

MOTION: (COMMISSIONER LITTLE) "MADAM CHAIRMAN, IN THE CASE OF FILE #85-81, RUSTY SUN SUBDIVISION FILING #1, CONSIDERATION OF FINAL PLAN, I RECOMMEND THAT WE FORWARD TO CITY COUNCIL WITH A RECOMMENDATION FOR APPROVAL WITH CONSIDERATION OF STAFF COMMENTS."

COMMISSIONER O'DWYER SECONDED THE MOTION.

CHAIRWOMAN QUIMBY REPEATED THE MOTION AND CALLED FOR A VOTE WHICH CARRIED 5-1. (COMMISSIONER RINKER WAS OPPOSED)

REVIEW SHEET SUMMARY

FILE NO. 85-81 DUE DATE 1/15/82
 ACTIVITY Rusty Sun Filing #1
 PHASE Final Plan ACRES _____
 LOCATION NW corner of 29 Rd. and Patterson Rd.
 PETITIONER Sego Services c/o Jim Lindell
 PETITIONER ADDRESS 843 25 Rd., Grand Junction, CO 81501
 ENGINEER Paragon Engineering

OVERALL CONSIDERATIONS

- OVERALL COMPATABILITY
- CONSISTENCY
- ADJACENT PROPERTY
- CHANGE IN THE AREA
- TRAFFIC IMPACT

HAS BEEN ADDRESSED
 HAS NOT BEEN ADDRESSED

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
	Staff Comments	1) This filing #1 is quite different than the approved preliminary plan. If approved per preliminary why the change? It is ridiculous to spend time reviewing a preliminary under the assumption the final will have little or minor changes. There are major changes here which will require full re-review by the various agencies. This creates problems which the agencies shouldn't be forced to do. They make their recommendations based on the preliminary plan to be incorporated into the final plan. The changes on filing #1 are not the result of the review agencies comments, but in fact are changes by the petitioner. The quality of this filing #1 is not of final phase development and should be considered a preliminary phase 1. 2) Need to resolve parkway issue per CC prior to final submittal to Grand Junction Planning Commission. For example: 16 approved units now requesting 21 units 1) No parking on private drive should be allowed. 2) Realignment of roads needs re-review, from 2 to 1 access. 3) Turn-around needs re-review. 4) No dimensions for drive provided and some driveways inadequate. 5) Set-backs have changed from 17' to 10' on north side. 6) Signage may have sight-distance problem. 7) No detailed signage submitted. 8) Under utilities notes - it states "locations shown are proposed and do not reflect the final design" This is the final plan and plat.

Continued on next page

<u>DATE REC.</u>	<u>AGENCY</u>	<u>COMMENTS</u>
	Staff Comments Continued	9) The 1st drive-way has changed from 35' to 20' off intersection of E. Indian Ck Dr. and private drive. There are more problems which haven't been resolved prior to final and thus this proposal should <u>not</u> be considered for final recommendation.
1/12/82	City Fire	We would request that the proposed private street be interconnected to Patterson Rd., allowing two means of emergency access to the development and one additional fire hydrant be installed where the private drive connects to Patterson. The dead end 8 inch line to be interconnected to the existing 18 inch main in Patterson to provide a looped line. Your estimate fire flow of 1500 GPM is not adequate. We believe an estimated flow of 3000 GPM must be provided. Building plan showing construction, type, sq. footage, site, etc., must be provided so a fire flow can be computed. The 22 ft. finish mat is not of a sufficient width, must be increased to allow 30 ft. finished mat.
1/12/82	G.J. Drainage	O.K. need tiling agreement for balance of Sub.
1/14/82	Mountain Bell	Easements are adequate as shown.
1/15/82	City Engineer	Public Improvements Guarantee is on Mesa County form and not to the City. Neither Improvements Agreement nor Guarantee are signed by anyone. This layout is totally different from the Preliminary Plan submitted in September 1981, and is much poorer design from standpoint of access and vehicular internal circulation. Some of the parking stalls will require very awkward maneuvers to enter and/or leave. No pedestrian facilities are included with this filing, therefore if other filings do not occur, no pedestrian facilities will be available. As stated in September comments, the floodplain of Indian Wash must be respected and addressed via permit procedure. Two accesses to Indian Creek Drive should be provided as indicated on the Preliminary Plan. Power of Attorney for F Road Improvements should be granted. The last manhole and part of the sanitary sewer penetrates Lot 8 so an easement will be necessary there. The waterline with this new plan is not looped as was shown on the preliminary. The sanitary sewer as shown on this latest plan will require cutting F Road which I understand was awarded for construction last week (29 & F Road Intersection). In my opinion this plan is significantly different from the Preliminary Plan.

LATE REVIEW SHEETS

1/18/82	Transportation Engineer
1/18/82	City Utilities
1/19/82	Mailed Summary to Petitioner and Engineer.
1/22/82	(ite #20
1/20/82	Public Service

RESPONSE TO REVIEW SHEET COMMENTS

File: #85-81
Phase: Final
Item: Rusty Sun, Filing No. One

<u>Agency</u>	<u>Response</u>
City Utilities	<ol style="list-style-type: none">1. A concrete trash pad will be provided at the entrance to "Rusty Sun Court". There will be no need for a trash truck to enter the court. An insert in the Covenants will be made.2. As per discussions 2-22-82 with the Planning Department, sidewalks will not be provided as per the final site plan.3. There is no on-street parking proposed. None shall be allowed on the private roadways.4. The sewer plans have been revised, eliminating the taps into manholes.5. The sewer mains as shown lie in easements.6. The structural section is engineered for the private roadways just as it is for dedicated city streets.7. The private roadways are designated as ingress, egress and utility easements.
City Fire	Indicated their acceptance of the plans as presented.
City Police	Had no objections.
Ute Water	Indicated no objection to the project and that minor technical discrepancies would be resolved.
Transportation Engineer	<ol style="list-style-type: none">1. Because of the limited amount of traffic on Rusty Sun Circle, the developer elected to propose overflow parking spaces, located at 90° on a curve.2. A "back-in" turn-around is shown on the plans to facilitate exiting from Rusty Sun Court for lots 6, 7, and 8. <p>Indian Wash area.</p> <ol style="list-style-type: none">3. See "Transportation Engineer (1) response.4. As noted in "Transportation Engineer (2)", the back-in space shown shall facilitate movement in Rusty Sun Court.5. A 6-foot wood fence shall be installed along the 160 foot north property line. The berming and heavy landscaping shown

Transportation Engineer Continued

3. The center line of Rusty Sun Circle is radial to the curve on East Indian Creek at the intersection point.

Floodplain Administration

The developer is not proposing any construction, modification, or alterations to the Indian Wash channel for Filing No. One

City Engineer (Late)

1. Indian Wash shall not be improved by the petitioner in any way other than "clean up"

2. The developer shall escrow \$60.00 per undeveloped centerline foot for Patterson Road improvements (see attached letter) drainage, irrigation, signage.

3. Editorial comments on driveways and sewer layouts were made.

4. Mesa County is reconstructing the 29 and F Road intersection at this time. As a part of that work, they are regrading Indian Wash adjacent to Rusty Sun, Filing No. One. When the reconstruction is complete, the flood plain will have been modified so that the development site is not impacted. The channel shall be surveyed and a new flood plain exhibit shall be drafted.

5. A guarantee of public improvements shall be recorded with the final plat for Rusty Sun, Filing No. One.

Staff

1. Minimum setbacks can be shown on the plan; however, the developer intends to re-plat around the units after they are built.

2. The developer wishes to cleanup the Indian Wash area.

3. See "Transportation Engineer (1) response.

4. As noted in "Transportation Engineer (2)", the back-in space shown shall facilitate movement in Rusty Sun Court.

5. A 6-foot wood fence shall be installed along the 160 foot north property line. The berming and heavy landscaping shown

Staff (Continued)

5. (Continued) on the plan shall provide buffering from Patterson Road.

6. Building heights shall not exceed 25 feet.

7. Curbside trash pickup has been approved by Bill Reeves. Units 5, 6, 7, & 8 (fourplex in NW Corner) will carry their trash to end of private drive where developer will create a pad for trash cans to set, only on trash pickup days. Covenants will be changed to cover this situation. Therefore, the trash truck will not have to back up drive.

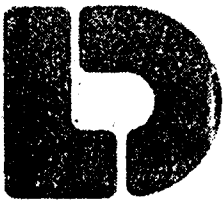
8. No improvements shall be made in Indian Wash with Filing No. One.

9. There is an existing pedestrian walkway from Indian Wash to East Indian Creek Drive immediately north of Rusty Sun Filing No. One.

10. The Fire Department has indicated their acceptance of unit, main & hydrant layout for Rusty Sun Filing No. One.

11. Yes - Covenants will be amended to cover part seven above. This will require residents of units 5, 6, 7, and 8 to carry trash cans down their drive to a specially designated area (perhaps a small concrete pad) on trash days. There will not be any park improvements to Phase One.

12. Building permits shall be applied for immediately upon approval of the final plat and plan.



Lincoln DeVore

1000 West Fillmore St.
Colorado Springs, Colorado 80907
(303) 632-3593
Home Office

August 24, 1981

Jim Lindell
842 25 Road
Grand Junction, Colorado 81501

Re: File No. 41103J
Surficial Geology
Rusty Sun Subdivision
Grand Junction, Colorado

Gentlemen:

At your request, personnel from this office have conducted a surface reconnaissance of the onsite geology in order to determine the general engineering geological constraints for construction on the site. Following are our findings:

The site is located primarily in the northeast 1/4, of the northeast 1/4, of the southeast 1/4 of Section 6, Township 1 south, Range 1 east of the Ute Principal Meridian and contains about 10 acres. The site lies at 29 Road and Hermosa Court, northeast of the city of Grand Junction.

Topographically, the site slopes gently to the south-southwest. Elevations on the site range from 4690 in the southern portions of the tract to 4700 in the northern portion of the site. The site is bordered on the east by an irrigation ditch which feeds across the site and empties into Indian Wash, which borders the western edge of the site. Some small piping was noticed outside the site area along Indian Wash. These pipes are outside the site and should not cause problems in construction on the site.

Geologically, the site is underlain by the Mancos Shale, which consists of a siltstone of marine deposition which underlies the ground surface at about 15 to 20 feet. Due to the deposition of alluvium over a probable irregular bedrock surface, thickness of the deposit will vary. A subsurface investigation would provide the necessary soils profile for this tract.

602 East 8th Street
Pueblo, Colo 81001
(303) 546-1150

P.O. Box 142
Glenwood Springs, Colo 81601
(303) 945-6020

86 Rosemont Plaza
Montrose, Colo 81401
(303) 249-7838

P.O. Box 1382
Grand Junction, Colo 81501
(303) 242-8968

P.O. Box 1643
Rock Springs, Wyo 82901
(307) 382-2649

#85-81

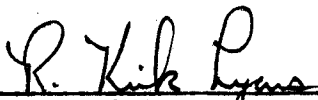
Jim Lindell
Surficial Geology
Rusty Sun Subdivision
Grand Junction, Colorado
August 24, 1981
Page Two

If any questions arise, or if we can be of further service, do not hesitate to contact this office.

Respectfully submitted,

LINCOLN-DEVORE TESTING LABORATORY, INC.

By:


R. Kirk Lyons
Staff Geologist

RKL:klm

Lincoln DeVore

1441 Motor
Grand Junction, Colo 81501
(303) 242-8968

December 31, 1981

Paragon Engineering, Inc.
2784 Crossroads Blvd. Suite 104
Grand Junction, Colorado 81501

Attn: L. F. Hanson

Re: Subsurface Soils Investigation
Rusty Sun (Mr. Jim Lindell)
Parcels 60 and 61, Filing 2
Indian Village
Grand Junction, Colorado
File No. 42187J

Gentlemen:

As you requested, we have drilled five (5) test holes on the above parcels and performed laboratory testing for the proposed Rusty Sun Development. The results are now in the process of evaluation and compilation in a report that should be issued in its final form near the end of next week, (about January 8, 1982), or the beginning of the following week. Pending final release, this letter is intended to provide a brief and preliminary report of our findings.

Foundation soils at these parcels consist of alluvial silty clays of low to moderate density overlying weathered Mancos Shale. The formational bedrock occurs at depths of 3 to 13 feet across parcel 60, with the shallowest depth at the north part of the parcel. Maximum allowable pressures will vary across this parcel and, in many areas, minimum pressures as high as 2200 psf will be required due to the proximity of the shale.

At parcel 61, more moderate densities and pressures are anticipated. No shale was encountered, the foundation soils consisting of alluvial and some residually weathered silty clays of moderate to low density and generally higher moisture content than the parcel 60 soils.

At this time, the use of shallow foundations of more or less conventional type (i.e. those typically used in this area) is anticipated. In some areas, lightly loaded buildings on the shale may require use of the grade beam and pad foundation system to concentrate loads to resist the potential swell.

Paragon Engineering, Inc.
Subsurface Soils Investigation
Rusty Sun (Mr. Jim Lindell)
Parcels 60 and 61, Filing 2
Indian Village
Grand Junction, Colorado
December 31, 1981
Page -2-

We wish to stress that this letter is intended to provide a general, preliminary report of our investigation. A final and complete soils investigation report is forthcoming that will provide more detailed information and recommendations. We urge you to use this letter only as a very general guideline and to await the final, detailed report before proceeding with actual foundation designs and related work.

If any questions should arise concerning this letter, please do not hesitate to contact this office at your convenience.

Respectfully submitted,

LINCOLN-DEVORE TESTING LABORATORY, INC.

By: Gary M. Krzysnik
Gary M. Krzysnik, P.E.
Senior Engineer

GMK/ca



PARAGON ENGINEERING, INC.

2784 Crossroads Blvd., Suite 104
Grand Junction, Colorado 81501 (303) 243-8966

March 8, 1982

City/County Development Department
559 White Avenue Room 60
Grand Junction, CO 81501
Attn: Alex Candelaria

Re: Rusty Sun Subdivision 85-81

Dear Alex;

As regards the Open Space fee for Rusty Sun Filing No. 1, we submit the following calculations:

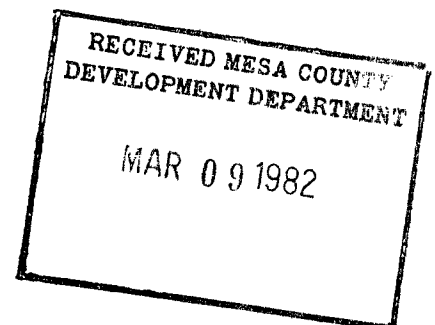
- Appraisal (both parcels) by Carl Hochmuth	=	176,120.00
- Total Acres	=	6.29
- Value/acre	=	28,000.00
- Filing No. One 2.319 acres x 28,000	=	64,932.00
- Open Space Fee	@	<u> .05</u>
		\$ 3,247.00

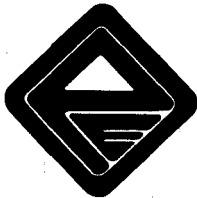
Please contact me if you have any questions regarding these figures.

Respectfully submitted,

L.F. Hansen
Planning Assistant

LFH:crl





PARAGON ENGINEERING, INC.

2784 Crossroads Blvd., Suite 104
Grand Junction, Colorado 81501 (303) 243-8966

March 16, 1982

RECEIVED MESA COUNTY
DEVELOPMENT DEPARTMENT

MAR 16 1982

Mr. Bob Golden
City Flood Plain Administrator
City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

Dear Mr. Golden:

Please find enclosed a marked up blueline print of a Revised Grading plan of Rusty Sun #1 showing we will not be working within the 100 year flood plain. As we discussed, after construction is completed by the State and County on the 29 and F Road improvements, we will survey the area and determine what changes have occurred and work out appropriate measures, if any are required.

Rusty Sun Filing #2 will be submitted with appropriate documentation showing what effect, if any, it will have on the 100 year flood plain so you may determine if a permit will be required for that phase.

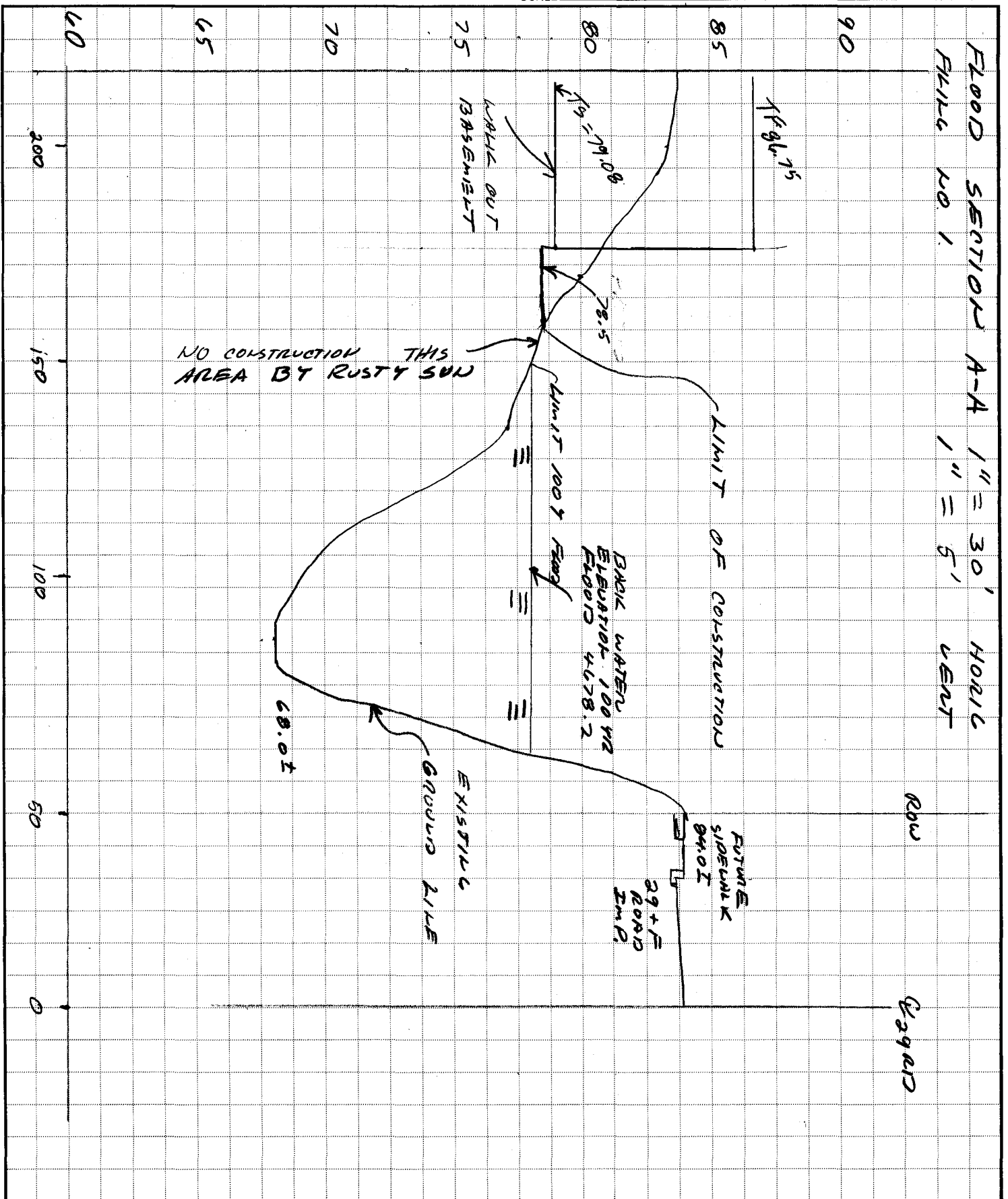
Mr. Lindell, the developer, will be working with the City Parks Department on what will be done in the wash. We feel that this work should be handled under a separate agreement regarding flood plain permit and flood plain modification when it is known what work is going to be done. When firm plans have been agreed to a proper study of their impact can be made.

I hope this information and approach will be agreeable to you. If you have any further questions, please give me a call.

Very truly yours,

Keith E. Powers

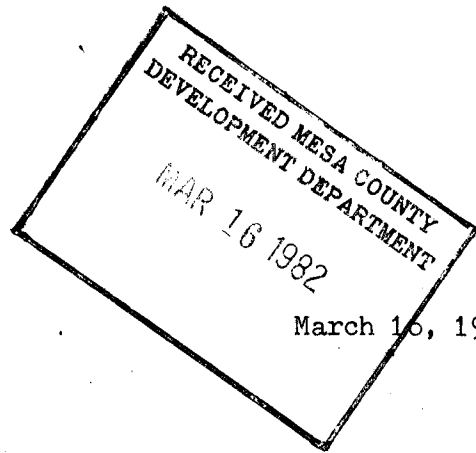
KEP:emb
Encl: As Noted
cc: Mr. Jim Lindell





Anbersha
CORPORATION

355 Bonny St.
Grand Junction, Colo. 81501
(303) 243-6588



March 16, 1982

Grand Junction Planning Commission

Dear Sirs,

As discussed in our meeting of March 15, 1982, between Alex, Ken Idleman, and myself, Rusty Sun L.T.D, the developers of a piece of property on the Northwest corner of 29 Road and F Road, agree to do the following in relation to the cleaning up and re-grading of Indian Wash:

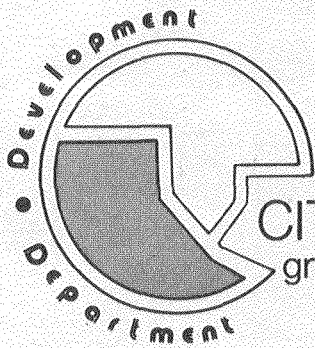
1. Rusty Sun L.T.D. agrees to pay a fee of \$150.00 (One Hundred Fifty and no/100 Dollars) per unit to the City of Grand Junction for improvements to parks and facilities, that either occur now or may occur later, in the city. This fee will be paid upon the closing of each unit that is purchased from Rusty Sun.
2. Rusty Sun L.T.D. agrees to obtain a flood permit from the city for any work that is to be done in Indian Wash.
3. A plan, organized with Ken Idleman and Ron Rish, will be submitted before any work is to be performed in Indian Wash.

Rusty Sun would like the Grand Junction Planning Commission to realize that our open space requirements were met back in 1978 and that the \$150.00 per unit is over and beyond any requirements that are imposed on Rusty Sun L.T.D..

Sincerely

James W. Lindell
Managing General Partner
Rusty Sun L.T.D.

JWL/lg



CITY - COUNTY PLANNING
grand junction-mesa county 55

Rusty Sun File

approved
Preliminary Plan →

wrong! →

Walkway deal rejected by city

By Michael Moss
Sentinel staff writer

The Grand Junction City Council said no thanks Wednesday night to a proposal to be a partner in a new public walkway. But they remained perplexed over just what to do about the litter-infested area that apparently belongs to the city.

"Your problem is that you've inherited a piece of land you don't want," said Thomas Logue, representing the developer who proposed the joint venture. The council agreed it has a problem.

At issue is the future of a quarter-mile section of the Indian Wash, an intermittent streambed that winds south from Interstate 70 along 29 Road to Orchard Avenue.

For now the wash is home to native flora and quail, while containing a robust crop of litter. The city has had visions of turning the wash into a three-mile public walkway, complete with drainage, lighting and pedestrian access.

That plan has fallen victim to a tight budget and may never be accomplished. But the developer of a private subdivision called Rusty Sun wants to step in and build the portion of the proposed walkway that runs along his project's quarter-mile boundary.

The catch is that maintenance of the walkway would be up to the city. That, council members agreed, was not a good deal.

"We'd be paying for the upkeep of an area that really will only serve the residents of Rusty Sun," said Councilman Karl Johnson.

"This could set a dangerous precedent," agreed Councilman Frank Dunn. "Every new developer we get along this wash will be asking for the same deal." Maintaining the walkway would involve regular cleanings and repairs.

"I'm only trying to create affordable housing," said Rusty Sun developer Jim Lindell, 843 Road 25. "This plan will benefit both the city and me."

The council, however, disagreed and only tentatively approved the development's construction plan, pending resolution of the walkway issue.

Among the alternatives rejected was a proposal to give the developer the land. Such a divestiture of public lands would require a public vote.

Lindell, in turn, balked at the idea of having his homeowners' association pay for the walkway development and maintenance.

The wash has a complex ownership history. It was originally given to the county under the county's dedicated open space plan, which requires private developers to turn over 5 percent of their acreage or a cash sum of equal value. The area adjoining Rusty Sun was then acquired by the city when it annexed the adjoining Indian Village subdivision last year.

The city has also adopted a dedicated open space formula, but is emphasizing the cash alternative to avoid similar acquisitions it simply can't afford to maintain.



PARAGON ENGINEERING, INC.

2784 Crossroads Blvd., Suite 104
Grand Junction, Colorado 81501 (303) 243-8966

January 5, 1982

RECEIVED MESA COUNTY
DEVELOPMENT DEPARTMENT

JAN 05 1982

Grand Junction City Council
City Hall
Grand Junction, CO 81501

Dear Council Members:

Mr. Golden with the Development Department has brought to our attention your concern in regards to the public open space within the Rusty Sun proposal.

In 1978, Sego Services, Inc. granted approximately 3 acres to Mesa County as public open space required with the development of Indian Village, Filing No. Two. It was agreed upon at that time that the County would construct and maintain a pedestrian pathway along the Indian Wash. At such time as the development adjoining the Wash was completed.

The petitioner for the Rusty Sun proposal intends to complete the following improvements to this open space presently owned by the City of Grand Junction:

- (1) Removal of all trash, debris, dead or diseased trees or vegetation.
- (2) Grade for proper drainage and gravel a 4' wide pedestrian pathway running the length of the Indian Wash adjoining the Rusty Sun proposal.
- (3) Revegetate with native grasses any areas which are disturbed during pedestrian path and debris removal.
- (4) Provide security area lighting.
- (5) Construct all necessary drainage controls, improvements along the Wash as necessitated by development of Rusty Sun.
- (6) All construction plans will be submitted for review by the City of Grand Junction prior to actual construction.

Park improvements will be phased concurrent with the construction of all units within Rusty Sun. Final park improvements will be completed at the same time as final construction of the last units within the proposal. At that time, it is the petitioner's understanding that the City of Grand Junction's responsibilities will be as follows:

- (1) Ongoing maintenance of pathway.
- (2) Removal of any additional trash or debris buildup.

Letter to Grand Junction City Council

Page 2

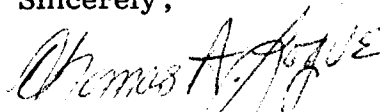
January 5, 1982

(3) Acceptance of any liabilities possibly incurred in the same manner as currently established for other City parks and recreational areas.

The attached exhibit illustrates the value of the Indian Wash adjoining Rusty Sun as it relates to a north-south pedestrian system within Grand Junction. Should the Council feel that this is not an acceptable proposal, the petitioner is willing to accept the three acres presently designated as public open space as a part of the Rusty Sun proposal, to be privately owned, operated and maintained by the Homeowners Association for Rusty Sun.

A member of our firm and the petitioner will be present at the scheduled City Council Hearing to discuss the proposal in detail and address any question which may arise.

Sincerely,



Thomas A. Logue

TAL:crl

Enclosure



CITY - COUNTY PLANNING

grand junction-mesa county 559 white ave. rm. 60 grand jct.,colo. 81501

(303) 244-1628

February 13, 1984

TO: All Owners/Petitioners

FROM: Grand Junction Planning Commission
Grand Junction Planning Department

RE: Enforcement of Development Schedules

Enforcement of development schedules of previously approved projects is an on-going concern for the City of Grand Junction. The City Planning Commission will be having their annual Extension/Reversion public hearing on Tuesday, March 20, 1984 at 7:00 p.m. in the City/County Auditorium, 520 Rood Avenue, Grand Junction, Colorado. You or your representative must be present.

By using the timeframes expected for development, the City is able to anticipate the needs for public services and improvements to provide service for these projects and surrounding areas. The City can also schedule those capital improvements required to be completed in conjunction with the project development itself.

The hearing will not be a re-review of the project for technical issues. It will be a discussion of anticipated timeframes for project buildout, and the likelihood of the project itself. Any project discussed without the Owner/Petitioner or representative present at the special hearing will be automatically recommended for reversion.

If an extension is requested by the Owner/Petitioner, the Grand Junction Planning Commission may grant an extension for one year. If the Owner/Petitioner requests a reversion, the Grand Junction Planning Commission will recommend reversion of that project and/or zone.

Enclosed is your project violation of the Grand Junction Zoning and Development Code. Also enclosed is the required submittal information for the Grand Junction Planning Commission to review.

We appreciate your continued cooperation in this process.

If you have any questions, please contact the City Planning Department at 244-1628.

Thank you.

BG/tt

Enclosures

This is to inform you that your project File # 85-81

Project Name Rusty Sun Sub. Filing #1

approved on 3/17/82 by the Grand Junction City Council,

is now in violation of the Grand Junction Zoning and Development Code.

It violates the development schedule process as indicated below:

Sec. 6-9-2C
(Final Plat)

All final plats shall be recorded within one year from the date of final approval. Failure to record within this time shall require re-review and processing as per the final plat processing procedure.

Sec. 7-5-4-C-5
(Final Plan)

Following the approval of a Preliminary Plan, the applicant shall file with the Department a Final Development Plan and Final Subdivision Plat in accordance with the approved development schedule. Approval of a Preliminary Plan is effective in accordance with the subdivision regulation (Chapter 6). An approved preliminary area may be finalized by more than one final plan and plat.

The Grand Junction Planning Commission is requiring the following information to be provided to this department a minimum of ten (10) days prior to the Special Public Hearing on March 20, 1984.*

Eight (8) copies of:

- a) Location, current property owner, and representative if applicable.
- b) Brief discussion of current status of the approved project. This should include the feasibility, likelihood of buildout, or anticipated changes to the approved plan.
- c) Development schedule anticipated for completion of next phase or buildout.
- d) Any work completed to date on the project to fulfill the next development process requirements. (i.e. if final approval, when is plat to be recorded, or if preliminary approval, when is final plan to be submitted?)
- e) Extension requested (one year maximum).

* Any packets not received or received after this date may result in automatic reversion.