MINUTES OF THE

SANTA FE COUNTY

PLANNING COMMISSION

Santa Fe, New Mexico

January 17, 2019

I. This meeting of the Santa Fe County Planning Commission called to order by Chair Charlie Gonzales on the above-cited date at approximately 4:00 p.m. at the Santa Fe County Commission Chambers, Santa Fe, New Mexico.

II. & III. Roll call preceded the Pledge of Allegiance and indicated the presence of a quorum as follows:

Members Present:
Charlie Gonzales, Chair
Frank Katz, Vice Chair
J. J. Gonzales
Leroy Lopez
Steve Shepherd

Member(s) Excused:
Susan Martin
Fred Raznick

Staff Present:
Penny Ellis-Green, Growth Management Director
Vicki Lucero, Building & Services Manager
Paul Kavanaugh, Building & Services Supervisor
Nathan Manzanares, Development Review Specialist
Mathew Martinez, Development Review Specialist
Tony Flores, Deputy County Manager
Eric Ames, Assistant County Attorney
Jaome Blay, Fire Marshal

IV. Election of Chair and Vice Chair

Member Lopez moved to retain Charlie Gonzales as chair Member J. J. Gonzales seconded. The motion carried unanimously.

Member Lopez nominated Frank Katz to be vice chair and Member J. J. Gonzales seconded. The motion passed by unanimous voice vote.

V. Approval of Agenda

Vicki Lucero noted that there were no changes to the agenda and it was accepted by consensus.

VI. Approval of Minutes: December 20, 2018

Member Shepherd moved approval and Member Katz seconded. The motion carried by unanimous [5-0] voice vote.

Chair Gonzales welcomed J. J. Gonzales to the Planning Commission.

VII. Consent Calendar: Final Orders

A. Case #APP 18-5130 Bruce and Debbie Macallister Appeal. Bruce and Debbie Macallister, Appellant, Joseph Karnes, Agent, Request an Appeal to the Santa Fe County Planning Commission, Appealing the Santa Fe County Land Use Administrator's Decision to Approve an Accessory Structure (Permit #18-110). The Property is 1.78 Acres and Located at 1467 Bishop's Lodge Road Within Section 31, Township 18 North, Range 10 East, SDA 2 (Commission District 1). Denied 4-0. John Lovato, Case Manager

MEMBER KATZ: I have a question about it.

CHAIR GONZALES: Okay, Mr. Katz.

MEMBER KATZ: Looking at the proposed findings and conclusions, I have a problem. On paragraph 56: "The Commission finds that the setback requirements in Section 7.17.5.1.1 apply only to the placement of fill." I don't think that's anything that we did decide, in fact I think we expressed the exact opposite thought. And it was only because the applicant agreed to move it back 25 feet from the edge of the arroyo that it was approved the way it was. And so I think that these findings and conclusions need to be reworked.

VICKI LUCERO (Building & Services Manager): So Mr. Chair, we will go back and look at revising the final order. So if the Planning Commission would like to table it we'll bring it back again next month.

MEMBER KATZ: Okay. I move to table.

CHAIR GONZALES: Okay. Do I have a second to table the Consent Agenda, Final Order Case # APP 18-5130?

MEMBER SHEPHERD: Second.

The motion to table passed by unanimous [5-0] voice vote.

VIII. NEW BUSINESS

A. CASE # SVAR 18-5230 Dawn R. Abriel Trust. Dawn Abriel, Applicant, Paul Mifsud, Agent, request a Dimensional Standard Height Variance to allow an existing residence to be 32 feet in height. Table 9-14-4 of the Sustainable Land Development Code identifies the max height allowance as 24 feet. The Applicant intends on installing solar collecting roof shingle panels and bring the home into compliance with the International Energy Conservation Code by installing a new 35 degree pitched roof. The site is zoned Rural Residential (RUR-R) within the San Marcos Community District Overlay (SMCD). The property is located at 22 Dutch Road, within Section 10, Township 14 North, Range 8 East (Commission District 3)

NATHAN MANZANARES (Case Manager): Good afternoon, Mr. Chair. On December 13, 2018 this application was presented to the Hearing Officer for consideration. The Hearing Officer recommended denial of the application as memorialized in the findings of fact and conclusions of law written order. The Hearing Officer found that the evidence presented by the applicant did not establish that all three of the variance review criteria were met. Specifically, the applicant did not submit evidence establishing that strict application of the code would result in peculiar and exceptional practical difficulties or exceptional and undue hardship on the owner.

Furthermore, the Hearing Officer found that the practical difficulties set out in the application and testified to by the applicant's agent involved use of special construction techniques and materials but do not result in practical difficulties that are peculiar and exception or in exceptional and undue hardship on the owner as required by the Sustainable Land Development Code.

Staff and the Hearing Officer believe that the applicant can have both a sustainable and energy efficient home on this tract without exceeding height limitations. Approval of this variance could set a precedent for future homes in the area. Therefore, staff recommends denial of this variance request.

If the decision of the Planning Commission is to recommend approval, staff recommends the imposition of the following conditions be imposed. May I state the conditions?

CHAIR GONZALES: Yes, you may.

MR. MANZANARES: 1. The development must comply with all other design standards of the SLDC and Chapter 9.14.2, Table 9-14-4.

2. The development must comply with Fire Prevention requirements and conditions.
3. The Applicant must obtain development permits from the County before any construction can take place on property.

Mr. Chair, I stand for any questions.

CHAIR GONZALES: Thank you, Nathan. Does the Commission have any questions of Nathan? Mr. Katz.

MEMBER KATZ: Nathan, I notice that there are no real elevations to show what the design that is required is going to look like, and there are incomplete floor plans. There's no floor plan of the second floor, and I'm just wondering how we can go forward without having a really complete application.

MR. MANZANARES: Commissioner Katz, the intent from staff was not to put an undue hardship on the applicant by having them design plans if a variance wasn't going to be approved. The applicant has provided some additional drawings today that he's going to present but we did not want to put the applicant through that expense if the variance was not granted.

MEMBER KATZ: I appreciate your sensitivity to that issue. Thank you.

CHAIR GONZALES: Thank you, Mr. Katz. Any other questions of staff? Okay, I have a couple. Has staff received any concerns from the San Marcos Community Organization in writing?

MR. MANZANARES: We have not.

CHAIR GONZALES: Okay. Do you know if the site is visible from State Road 14?

MR. MANZANARES: Mr. Chair, I do not believe – it's a fairly big parcel. I believe there's a natural berm. Also some topography that shields it from 14. It's definitely visible from Dutch Road, but I do not believe that it is and we do not require a visual impact analysis at this point.

CHAIR GONZALES: Okay. Another question is have is did you guys – one thing that I'm concerned about is, okay, you have a flat roof and now you're changing to a pitched roof. You're changing the drainage patterns. So at one time the canales used to be on one side and your drainage on one side and now you do a pitched roof. You're changing the pitch so now you're going to have drainage on both sides. So are you guys going to require a revised grading and drainage plan?

MR. MANZANARES: If it is the Planning Commission's decision to approve, all that would be ironed out during the permit process. There again we didn't want to get into too much detail, cause the applicant an undue hardship for cost of hiring a civil engineer/architect to design something that may not happen.

CHAIR GONZALES: Okay. My last question: Could you explain the three-foot allowance for solar panels?

MR. MANZANARES: Yes. So the SLDC allows a three-foot allowance on top of the max height of an area. So additionally, if you have a 24-foot height restriction, if you put it above – basically on the roof line you get an additional three feet past that 24 allowance.

CHAIR GONZALES: Mr. Katz.

MEMBER KATZ: What was the "it"?

MR. MANZANARES: The array itself.

MEMBER KATZ: So this allows the arrays to be above the limit but not the roof.

MR. MANZANARES: Exactly. Just the array to exceed the three-foot maximum height allowance.

MEMBER KATZ: Thank you.

CHAIR GONZALES: Thank you, Nathan. Okay, any other questions of staff? Okay. Is the applicant present? You may make your presentation.

[Duly sworn, Paul Mifsud testified as follows:]

PAUL MIFSUD: Paul Mifsud. Chair Gonzales Commission members, my clients have – the owners of the residence have a desire to be environmentally conscious and eventually to be completely off the grid and have electric vehicles and generate

enough electricity to heat their home and provide domestic hot water and run two electric vehicles. They also have a concern about the aesthetics of a flat roof and their home as it is now, which was built in 1973. It is an adobe home. It has a viga and wood structured roof with about an inch or two of pumice on top of it, not much slope, and exposed ductwork on top of the roof.

There's a photograph that's taken from the neighboring property to the north and it sits down from Highway 14 and from all the neighboring properties. It's hard to see the photo. I can pass it around. This is basically a sketch, tracing on this. As you can see the mechanical ductwork sitting on top – uninsulated. This is our concept below of the roof that they would like to have with the solar panels on it. We had neighborhood meetings. None of the neighbors were concerned about their views and they generally were in favor of the project over all.

It's not what they want, but I would like to address staff's supposition that a new roof that's insulated and houses the ductwork could be built within the height limit. I have a couple of these so I could hand them to you and you can pass them around. This outlines what I see as the minimum construction that would encompass the ductwork and insulate the roof, which needs to be done, obviously. That diagram – it's a 22-foot span in the space on the second floor and what that diagram shows is taking the existing parapet off and replacing it with an eight-inch concrete bond beam to support a new roof structure. The minimum structure required would be 18-inch truss joists at 16 inches on center and then to achieve our 38 to meet the International Energy Code, 2009 Energy Code which is currently in force, would be seven inches of rigid insulation. At a 23-foot span it would require six inches of slope to meet the minimum quarter inch per foot slope for any low slope roofing.

The new roofing companies, the warranties aren't in effect unless roofing continues up 12 inches up the parapet, which many of you may know. And also the International Building Code, Section 705.11.1 requires 30-inch high parapets.

So even without the 30-inch high parapet, just to reach the top of the roofing, we're at I believe it's 24'7", what is on there on the diagram, and then 26'1" to the top of the parapet. I don't see how we can encompass the ductwork and insulation with a proper roof slope with the structure, with the existing construction, even with a flat roof. And again, a low slope roof parapets is not what the applicant wants in any way, but I thought I would address the fact that staff said it could be built within the height limit. I don't believe it can.

CHAIR GONZALES: Okay, so this isn't actually the rough section you're going to use, right? It's not the one you're going to use.

MR. MIFSUD: It's not the one we would like to use. No. We would like to do a pitched roof with trusses and put the mechanical and any insulation in the attic space.

CHAIR GONZALES: Okay. Thank you. What else? Is that it?

MR. MIFSUD: The owners of the house would like to address you as well.

CHAIR GONZALES: Sure.

[Duly sworn, Dawn Abriel testified as follows:]

DAWN ABRIEL: Dr. Dawn Abriel. Good afternoon. The right way is to say Mr. Chair and Board? I didn't notice that. Part of the idea is that the neighbors

approve or don't approve. I have a couple of emails from neighbors who are saying that they wished us luck. They hope the roof goes through. I can show you the emails if you want.

But one of the things that is not really obvious is when you drive onto this property you're high, coming off of 22, and then as soon as you get into the driveway you're looking down onto the roof. And it's ugly. It's a beautiful piece of property. It's a beautiful home, built for Bob Dylan in the seventies and it has this ugly roof. And to put the solar panels on it would make it uglier. Even if we could get the insulation you would be looking at the back end because you're looking south there. You would be looking at the back end of the solar. Whereas, if it's on a pitched roof, when you're looking at the property you're looking at only the nice line of the roof and the solar panels would be on the south facing. So for your consideration.

CHAIR GONZALES: Thank you. I'm pretty familiar with this site. From what I remember is I think that property is maybe a little bit visible from the turnoff to Galisteo in that downhill stretch down there.

DR. ABRIEL: Like a quarter of a mile. When you take that dip, just before the dip you can just see the house.

CHAIR GONZALES: Right. Okay. Thank you. Would you like to speak as well?

[Duly sworn, Derek Roth testified as follows:]

DEREK ROTH: My name is Derek Roth. I'm married to Dawn Abriel. I'm passionate and emotional about this so it's something I care about deeply. I went to the meeting a month ago with the Hearing Officer and presented a short version of our reasons and concerns and desires. When the report came out it said that no one testified in favor of the proposal. I was there; I testified. It said that no reasons were given beyond the energy conservation question. I gave a lot of reasons. I spoke with Nathan this morning and he said, well, you're the applicant so that's why. We just leave that out normally. But to me it seemed like both my presence and my reasons were not acknowledged, not addressed in any way. So I wrote them up in even greater detail. I don't know if you're wanting to take the time for hearing these sorts of things from me, but to me they really matter. This is the last house I ever expect to live in or at least do anything significant on.

CHAIR GONZALES: Sure. Go ahead and proceed.

MR. ROTH: Okay. Thank you. So we're talking about a house in the San Marcos district. It's a very diverse area, as you all know I'm sure. Right now, the San Marcos District is having a series of public meetings which are looking at revising the San Marcos overlay, and I've attended one of those meetings. I was unaware of the process until shortly after this meeting in December. I'm not sure why. I read my mail. Dawn reads her mail. We didn't see anything about it. But I've attended a meeting and I understand a little more about the process now.

There are some things in that document process that I think support our goals, specifically a statement in the document is we want to encourage the use of renewable energy and sustainable land use patterns to conserve natural resources, enable rural lifestyle, set an example for education, sustainability and resource management. That's what we're trying to do and we think we're very much in line with that. We think our design addresses it better than the flat roof proposal.

There are also a couple other quotes I'd like to make from that. One of the goals and actions in this plan that is currently emerging from the San Marcos overlay project is to "review, design guidelines to encourage as much use of renewable energy and smart land development patterns as possible." And "explore options to remove barriers for renewable energy projects." So these are two things that are for us right now a barrier to get the solar panels that we want and other aspects – water harvesting and other things that we want. We think we're going to be more successful with a pitched roof than with the flat roof.

Now, you mentioned the concerns about a regarding of the site and diverted water. We currently take all of the water from the roof into ducts that lead to an underground cistern and those flows from the second floor, which is where we're putting the roof, go on to the roof of the first floor and then out of canales and into this system for taking the water into the cistern. So that would not change whether we have the flat roof or the pitched roof, but we would prefer the pitched roof.

CHAIR GONZALES: Excuse me. Could you explain that a little bit more? So you have a flat roof and the water goes to one side of the houses where the canales are at, right?

MR. ROTH: To three sides of the house.

CHAIR GONZALES: Oh, three sides? Okay, so now you're putting a pitched roof, so now it's going to be forced to two sides, right? Oh, you're going to have the four sides roof on the – okay. I see. Continue.

MR. ROTH: Right. So each of the current spills from the top story go on to the first floor and from there to a secondary set of canales that go down into catchment basins into underground pipes that go into a cistern.

CHAIR GONZALES: You say the house is kind of old. Is that first floor roof going to be able to carry the load of the water coming from the new roof?

MR. ROTH: Well, again, in my view, we're not changing the amount of water that is falling onto the first floor, because everything that's hitting the second floor now goes onto the first floor, and afterwards, whatever roof style is approved, all of that water will still go onto the first floor in exactly the same way that it has since the building was constructed.

CHAIR GONZALES: Okay. Continue.

MR. ROTH: So then there's another quote in here that I would like to bring to your attention, which I think addresses what we're trying to do. This is actually from the approved 2015 land use plan. It says, "A community plan is intended to permit communities to recommend adoption of particular land use regulations based on the needs and goals of the community" and then there's a section I'm leaving out. And then finishes, "and to subsequently update plans as necessary due to changing circumstances" That's where we think we are.

I've been trying to learn – I'm an amateur; I'm not a professional but I've been trying to study everything I can both about the specifics of this situation and more generally for the last 20 years, I've been trying to learn about sustainable building and energy conservation. This morning I learned from Nathan that this regulation, the height limit of 24 feet comes from 1981. That's 37 years ago, 38 years ago if you want to include 2019. So we've learned a lot. Our views of sustainability have changed a lot in that time and we have a tremendous amount of building stock in this country, specifically

our house, that needs a lot of help to reach the kind of conservation levels that are considered normal, that are in the code right now.

So a lot of people need to make a lot of changes. And this particular limit is difficult for everyone if they want to make their house substantially more energy efficient, particularly for us when we're here now. I'm not saying we're worse than other people, but we want to do the best we can. We don't want to do what was great for 1981. We want to do what's great for 2019 and 2029.

So we want to do more than the minimum. We want to do better than the least we can do. So one of the other things that I note is that we are zoned as residential rural, or rural residential. Within a quarter mile of our house is rural, and only slightly further is rural fringe. The height requirements for those two kinds of parcels, which are not immediate neighbors but quite close to us, are 50 feet. So we are limited to less than half of those height limitations that would apply to close neighbors. And we'd like to just get a little bit more than the minimum.

As I said, there's tremendous diversity in the San Marcos area. Lots of houses already exceed these limits. They were grandfathered in, I presume. Lots of houses need help. They need to do something, maybe something like us, something like what we're asking for. Another aspect is that plenty of houses are built way up on the ridgelines, and they're very visible. Lots of them are beautiful. Many are in the valleys. Some are in the middle. We're in the middle. If you approve our request for this height variance our ridgeline will still be substantially lower than our immediate neighbor to the north, our immediate neighbor to the south, and roughly the same as our closest neighbor to the east. So although we might have a tape measure height greater than the current limit of 24 feet we would not be sticking up abnormally compared to our neighbors or blocking their views.

So one of the other things that I've discovered and think about in trying to understand where we are and what we can do is that the International Residential Code, which applies mostly to the entire country, of course there are local variations and increased limitations, but it would support this. We would have no need for a variation if that was the code that's in force. The issue is because of this mysterious number of 24 feet from 1981. I asked Nathan. I asked five other members of the staff and have looked on line to try and find out why is that number there? What does it do? How does it improve the community? How does it improve sustainability? No one has been able to give me any information, so I can't respond to whether it's a good thing or a bad thing or whether my views and desires are going against something valuable or whether it's just kind of a curiosity. But I would love to see it not apply to us in order to allow us to have a normal roof on this house.

For more than 100 years one of the most common northern New Mexico building styles has been a two-story house with a pitched roof. The building immediately north of us here in this town is a beautiful two-story house with a pitched roof. The next house up, the very same thing. Those houses couldn't be built if they were on our property. I think they're gorgeous houses. I don't think anyone is trying to knock them down here in Santa Fe. But we can't do what they did and we think it's a good thing if people were allowed to make two-story houses with pitched roofs. It is the most energy efficient general house plan used in this country in terms of maintaining the smallest footprint. A cube, is for building purposes, pretty close to the smallest surface area for internal area. And a

pitched roof if very effective for putting in the mechanicals, the heating and cooling ducts and things of that sort.

So that's what we think we want to do, and we think we have good reason for trying to do that.

CHAIR GONZALES: Okay. Is that it?

MR. ROTH: No. I will stop if you want me to but –

CHAIR GONZALES: Try and wrap it up now if you can.

MR. ROTH: Okay. So in the discussion by the staff, only the energy issue has been mentioned, so I would like to say that we've got many other things we care about. Aesthetics is a very big one. Even if we used the variance, or whatever it's called, of raising the panels above the roofline, that would just make the aesthetics worse, as has already been mentioned. We'd like to keep the panels below the roofline.

Energy efficiency, it says – is it R-39? But we're already in 2019. The 2018 International Residential Code, although it hasn't been adopted here yet, already specifies R-49. Every issue of the code, the numbers go up. So again we don't want to aim for the lowest that happens to be currently legal; we want to aim for what the whole nation is aiming for: better and better, higher and higher numbers, and I don't think we can do that with the foam. We can do it affordably with loose fill insulation under the pitched roof.

To protect the walls, overhangs are very good. To protect the doors, to protect the windows. That's hard to do with a flat roof. It looks weirder and weirder the father out you extend the overhangs. More than just the protection of the walls and doors and windows is the views. We have great views like many places. We like to look out. Well, most of the time the sun is blasting in. The primary windows are to the west and the south on the second floor. We have to close the curtains on most of every day through three-quarters of the year. If we had decent overhangs we would be able to see the beautiful outdoors and not be limited by the sun coming in. We'd have solar gain when we wanted it in the winter and we would have shading to cut down on the unwanted gain and the extra heat load that it produces currently.

Okay. I guess I can stop there.

CHAIR GONZALES: Okay. Just, you know, you have your national codes and you have your local codes. Your national codes, they set it up basically and then the individual communities can come in and they can have more stringent codes, and that's what's happened over here. The City and the County do that all the time. You have the national codes and the city codes are more stringent, and then you have overlays and all that stuff adds up and that's how you get to the restrictions.

MR. ROTH: Thank you. And thanks to the Planning Commission too.

CHAIR GONZALES: Let me see. Does the Commission have any questions of the applicant?

MEMBER SHEPHERD: Mr. Chair.

CHAIR GONZALES: Mr. Shepherd.

MEMBER SHEPHERD: I have a question for the applicant. What type of solar system? Describe the solar system you're talking about please.

MR. ROTH: So we would like to put photovoltaic panels and potentially also solar thermal panels on the proposed pitched roof so we can move towards 100 percent of our space heating needs from those two types of solar collectors. All of the

details haven't been worked out, in part because we don't know exactly what kind of roof we're going to be able to have.

MEMBER SHEPHERD: Are you going to use the photovoltaic to spin the meter backwards or are you going to put them into batteries and be independent?

MR. ROTH: At some point batteries may be reasonable. We already have a REC contract with PNM and are already putting some energy, some electricity into the system. At the moment batteries are still very expensive in terms of kilowatt-hour, but the time I think is coming soon when it will be reasonable to choose home storage and we wouldn't have to be grid-tied at that point, although we might still want to contribute excess electricity to the grid so that other people could use it.

MEMBER SHEPHERD: The second floor, if you put the pitched roof on it, how does it change the interior of the second floor?

MR. ROTH: In our view it would only change it in regards to the overhangs, which would give, as I already mentioned, the shading from unwanted sun and the chance to look out the windows more. But it would not change the square footage of the interior space in any way.

MEMBER SHEPHERD: I've been off the grid for over 20 years and I'm completely off the grid with solar and wind power. I live about ten miles south of you. I did not put my solar panels – I built a house two years ago and I did not put the solar panels on my roof for two reasons. First is I was really reluctant to put any holes in my roof because over time with this sun you never know how sealant dries out, on and on. The second thing is you mentioned the 35 degrees. That's nominal. But if you put the solar panels on the ground like I did with an array you can change it up 15 for the summer and down 15 for the winter from that 35, and you get extremely better performance out of your solar panels. Also it's easier in case there's any type of maintenance or whatever that you have to do. So I'm wondering why you're not looking a couple posts in the ground and adding a solar array at ground level instead of up on your roof.

MR. ROTH: Well, our land is not flat. It's got a lot of erosion from centuries, presumably, so we do not have really any superb flat spaces. We do have spaces where we could put the solar panels but we're hesitant to use up some of our best flattish land to have solar panels when we feel like although the roof is maybe not perfect in every sense it's certainly got lots of pluses. We have a certain number of surviving juniper trees. Almost all of the pinons died. We have just half a dozen of those, but many of the places where we might put the solar panels would require cutting down some of our relatively few remaining trees. So again, we'd prefer to have the panels up above all of the shadow concerns and protect our current vegetation.

MEMBER SHEPHERD: Well, you know, you don't need a flat surface. All you need is a clear view to the south for solar panels. So you could put it on a slope where it's not useful for anything else and you could sink a couple posts in the ground and put your solar there as long as there's a clear view to the south.

MR. ROTH: Well, there's some advantage to having a certain amount of exposure to the east and west as well. The sun does rise in the east and set in the west. Okay. So you don't have any interest in that.

MEMBER SHEPHERD: If you do some more research you'll find they always say put your panels true north, not magnetic north, and that's the compromise,

unless you're going to put a tracking system on it that allows it goes from east to west. You put it true south, I mean.

MR. ROTH: We've talked to Positive Energy and several other solar contractors and they have taken measurements and they have said, well, this, you've got south exposure but in the morning that tree is going to block your panel. It's going to cut your production. In the evening you're going to lose production from this tree over here. So it's not that we couldn't do that, but we've talked to solar professionals and they have made their recommendation that there's some advantages to not doing it that way.

MEMBER SHEPHERD: Positive Energy is a good company. I know them well. When I look at – your current height is 21 feet?

MR. ROTH: Yes.

MEMBER SHEPHERD: And when I look at the calculations, you could request a minor deviation of ten percent above the 24 which would get you to 26'4", which means you'd have 5'4" of additional height. You could do, for insulating your roof, without a pitched roof and still be within the County requirements. Have you considered that?

MR. ROTH: Yes. And our architect went some of our thinking on that that in his view we still couldn't quite get in under the wire, although we would be close. But it does not meet any of the other reasons why we want to do this roof. So for us, we're passionate about making our house more like we want it and better. If someone says, well, you could build it completely different than you want and you could put your solar panels in a completely different place than you want and you can do all the things different than what you want. That's all true. But as a homeowner I think I and most homeowners would say we're not trying to build somebody else's house they way they want their house. We're trying to do a really good job of building the house the way that we think it will be the best for our neighbors and ourselves and for the future.

So I admit there are plenty of alternatives that we don't like that could also work. But we would like to do something that we do like. I don't know what we will do but I think for the majority of the public, if it's impossible to get what they're looking for they simply won't invest at all and we will end with more housing stock for longer that is substandard, because it doesn't make sense to people to put a whole lot of money into getting something they don't want and doesn't look like what they're looking for.

MEMBER SHEPHERD: Thank you.

CHAIR GONZALES: Thank you, Mr. Shepherd. J. J.

MEMBER J. J. GONZALES: I've got a couple of questions. I saw a photograph of your residence. Do you have existing solar panels on part of the house right now?

MR. ROTH: We do. We have some panels up near the corner of our property on trackers and we have some panels that are on the flat greenhouse roof that feed our electric hot water heater so that our domestic hot water is for the most part, except for the last few weeks when we had so many cloudy days, we get all of our hot water heated by photovoltaic electric. So that's been part of our commitment to try and reduce our carbon footprint and our fossil fuel use. We want to continue that and expand it until we have no fossil fuel use.

MEMBER J. J. GONZALES: And the other question I have, the lower photograph there, the sketch, is that – what orientation is that? Is that south facing or what's the direction of that?

MR. ROTH: This corner is kind of north-northeast. The rest is over here and this is northish. It doesn't sit precisely oriented towards the compass. This is mostly east, slightly to the north, and so the south end side you can't see at all in this drawing.

MEMBER J. J. GONZALES: On which surface of that pitched roof are you planning on installing your collectors?

MR. ROTH: This would be on the south face.

MEMBER J. J. GONZALES: It's south-facing or is it southeast or – what's the orientation?

MR. ROTH: I think it's about six degrees west of south.

MEMBER J. J. GONZALES: Within six degrees?

MR. ROTH: Yes.

MEMBER J. J. GONZALES: I don't see the orientation here because the solar panels that are existing now, how are they oriented? Is that towards the south-southeast?

MR. ROTH: They are also at the same angle that we would be looking at the new ones in terms of the ones that are on the greenhouse roof. They are aligned with the walls of that addition to the house, which is the greenhouse. So they're a little bit off south. And then the ones up at the higher end of the property are on two axis trackers. So they follow the sun from sunrise to sunset.

MEMBER J. J. GONZALES: The other question I have, I see on the photograph on NBA-12 you have ductwork on your roof right now.

MR. ROTH: Yes.

MEMBER J. J. GONZALES: Is that correct?

MR. ROTH: And also the heating and cooling device itself. It's a combination air conditioner and heater that sits up –

MEMBER J. J. GONZALES: That's mounted on the roof.

MR. ROTH: Yes.

MEMBER J. J. GONZALES: That heats what part of the house?

MR. ROTH: It heats and cools the entire upstairs.

MEMBER J. J. GONZALES: Just the upstairs.

MR. ROTH: Yes.

MEMBER J. J. GONZALES: What do you use downstairs?

MR. ROTH: We have no cooling downstairs. We have a second aging propane-fired furnace with forced air downstairs.

MEMBER J. J. GONZALES: Do you utilize any passive solar on the south-facing sides of your house? I see some windows there but I don't see any large windows like for passive solar.

MR. ROTH: No, the house was poorly designed by someone who didn't understand solar or much about architecture, and so particularly on the first floor, the chances for passive solar are poor. On the second floor they're slightly better but the south facing wall – it's not a square. I don't know if that's visible in any of the documents you have.

MEMBER J. J. GONZALES: Well, I see that it's not a square at all. So I would say it's difficult to do a flat surface that allows a lot of solar panels. The other question I have –

MR. ROTH: Excuse me if I may. The roof will be square or rectangular, so it will make it much easier to do approximately south oriented panels. But the upper story itself would take a lot of modification to make passive solar particularly strong there. What we get is the wrong solar of the big west windows pulling in way too much heat most of the year. But the south, the wall is broken up into three different sections at three different angles. So we're limited there unless we ask for even more dramatic remodeling of the second floor.

MEMBER J. J. GONZALES: The other question I have is I read here that you are talking about solar shingles. Is that just something different other than solar panels?

MR. ROTH: Yes. There are three companies that we know of that make shingle-type roofing materials where the shingle itself is also generating photovoltaic electricity. And so they can be placed on a roof as really part of the waterproofing and part of the roof, and therefore there's no racks, there's no penetrations – those were mentioned earlier by Mr. Shepherd, and you can generate a certain amount of electricity that way. The ones from Tesla which we have thought about using may or may not be available by the time we get to building this. We have no idea when we're going to be allowed to build this if at all. There are two other companies that do make them that are available now. So that is an option we're considering. But until we know really where we stand we don't know whether it makes sense to try and include those or include regular solar panels on top of a metal roof or some other kind of roof.

MEMBER J. J. GONZALES: The other question I have is you request 8'6" higher than the 24 that's allowed by the code, and you say going to 32' 5" or so will give you a 35 degree slope. And if you go to what is allowed, I think 29'4" is what you can administratively get. What is the difference in the gain from 35 degrees if you go three feet lower to 29'4", what would be the difference in degrees? Would it be like 30 degrees or something? What percentage would it be less than what you can gain? And Mr. Shepherd said in the summertime the sun migrates higher in the sky. Thirty-five percent grade is maybe ideal for the winter months but in the summer months he tilts his collectors 15 degrees to get the higher gain from the sun that's higher in the sky. So I was wondering, have you figured out the difference in gain between 29'4" and 32'6"?

MR. ROTH: Again, I've spoken with Positive Energy and some other solar contractors about this. I don't have a precise answer to your question. They say that 35 degrees is optimum for year-round gain. It's certainly true that it's less gain in the summer and more in the winter, but the needs are less in the summer and more in the winter. It's in the winter where we have more clouds. We have all of our heating needs in the winter and I think with a properly insulated roof our cooling needs will be relatively modest. Nonetheless, I think if we could go to 29'4" – is that what you're saying?

MEMBER J. J. GONZALES: That's what you're allowed administratively.

MR. ROTH: If that's true – I had not heard – we've got the roofline that high but if we could that would be better news than I've heard up to now.

MEMBER J. J. GONZALES: Well, maybe I misspoke. Because they allow you to go 26'4", 10 percent above 24 feet. So that's 26'4". So that's what you're allowed. Then they say any collectors can go three feet higher than that. And I was wondering if maybe staff can answer my question. Can the roof go 29'4"? Just the collectors can go three feet higher.

MS. LUCERO: Mr. Chair, Commission Member Gonzales. That's correct. The roof line would be limited to 26'4" and then the arrays themselves could go up an additional three feet.

MEMBER J. J. GONZALES: Okay. Thank you.

MR. ROTH: And as my wife mentioned, we think part of the favor we're doing to ourselves and our neighbors is to not have an ugly roof and having them look at the backs of the solar panels, if they extend three feet above the ridgeline would be suboptimum from our point of view and theirs.

MEMBER J. J. GONZALES: The other comment I have is you know that you have alternatives. This is one – the alternative that you want is to raise the roof to 32'4" and the problem I have with that is that the San Marcos, this code and countywide, they have height limits.

MR. ROTH: Not really. Countywide for rural residential. But as I mentioned, our nearby neighbors have limits of 50 feet. So it's not uniform. It's variable. We are in a zone that is 24 feet, but it's not like everywhere has that limit. In fact the majority of the county land near us has a 50-foot limit. We just don't happen to fit under those regulations.

MEMBER J. J. GONZALES: That I wasn't aware of because I know the code says 24 feet countywide. That's a limitation. And the thing is what you're trying to do here – I admire you trying to do a solar array, go passive solar, go renewable energy and stuff, but the biggest problem I have is if they grant you 32'4" that opens the door for everybody that wants to do something different than what you – not with your intentions, but something just different because they say, well, so and so was able to go to 32 feet. Why can't I? This has a lot of countywide impacts. It's not just one residence here and one residence there. This sets a precedent for countywide impact.

MR. ROTH: And I think that would be a very good thing. We have a big problem – even the president's council, and we know what the president thinks like, said that global emissions of greenhouse gases is the most serious problem facing us. Thirteen federal agencies released on November 23, 2018 a report saying we have to be very, very aggressive in cutting greenhouse gas emissions. There are hundreds, thousands of houses in this county that need major upgrades and putting pitched roofs on them would be a great ability to help fight this worldwide ecological problem.

So from my point of view, I recognize that you're not sitting where I'm sitting on this, but from my point of view it would be great for everyone to put pitched roofs on and increase insulation and decrease our greenhouse gas emissions rather than sticking with a curious number that makes it impossible to do what New Mexicans have done for over 100 years and comes from 1981 and no one can explain why it's there.

MEMBER J. J. GONZALES: Thank you. No further questions.

CHAIR GONZALES: All right. Mr. Katz.

MEMBER KATZ: Yes. I'm a little confused as to the orientation of the roof that you want to put on. You say in that sketch, the façade we're looking at it's northeast?

MR. ROTH: So the largest side that we can see here, with the three windows above the portal is mostly east but slightly north of east. So it's within – I'm not certain, roughly six degrees I think, of east.

MEMBER KATZ: And on the other side, which unfortunately you don't show us a picture of, what is the roof going to look like there?

MR. ROTH: Well, the roof – well, the house itself has this funny truncated and notched half-octagon shape. The roof will be rectangular. It will extend over the corners and the odd parts of the shape, so that one complete line of the roof will face almost south. One will face almost east. One will face almost north and one will face almost west. It will be bigger, with overhangs to cover the oddities of the current floor plan and to provide good shading and overhangs for the reasons that I mentioned earlier.

MEMBER KATZ: Okay, I'm looking at the photo that's attached, the aerial photograph that shows the solar panels you currently have on the greenhouse, you said?

MR. ROTH: Okay, so that's not this photo; that's a different photo.

MEMBER KATZ: No. It's the one that's in the materials, probably a satellite photo.

MR. ROTH: Can I take a quick glance at it so I know what you're referring to?

MEMBER KATZ: Showing the solar collectors. They are facing not directly in front of the flat part of the roof. They're facing the angled part. Are they not rigged up south facing?

MR. ROTH: No, they are closer to south than that short section. South is in between this place and this plane, and these are facing in between those two planes. So they're closer to south although they're still not perfectly south.

MEMBER KATZ: I tried to draw a line that seemed to reflect what north was, based on the solar panels, and it's pretty much what would be the ridgeline of the roof that you're proposing, wouldn't it?

MR. ROTH: The north and south? The ridgeline is near north and south, slightly to the west at one end, slightly to the east. North and south is close to there. So it's close to the ridgeline but not right on it.

MEMBER KATZ: So what angles are the panels going to be at? Aren't they going to be flat against the roof?

MR. ROTH: That was our thought.

MEMBER KATZ: Then they'll be facing west.

MR. ROTH: No. That plane of that quarter of the roof – this is not a gable roof. This is a hip roof.

MEMBER KATZ: So it's just that one hip.

MR. ROTH: That one hip is tilted at 35 degrees for optimum collection and is facing pretty close to south.

MEMBER KATZ: Okay. How many panels do you expect to put on that?

MR. ROTH: I don't remember the calculation. Paul, do you have a sense of how many square feet we've got on that plane?

MR. MIFSUD: It's probably about 500 square feet of panel that we could get on that plane.

MEMBER KATZ: Okay. Have you considered other locations on your roofs to put panels?

MR. ROTH: Yes. Again, we spoke with Positive Energy and – I'm sorry. I'm forgetting the other name of the company that we've had come out and talk to us. Solar Logic and what's Rob's company? Solar Wise. So all three of those people have visited the site and offered their opinion of what we might do. The structure of the second floor blocks much of the first floor where we might put the panels on that first floor level, first floor roof, in that – well I guess there is the portal. We could potentially do something there, but the main part of the roof, we have the solar panels for our water heating now on the greenhouse area, and there's a little bit of space there facing to the south, so we could add some additional panels between the house and those panels that are on the greenhouse.

The rest of the roof would be blocked roughly until midday by the house itself and so it would get solar in from 11:00 or noon on towards the evening. So there is some space for that but it wouldn't be nearly as good as the clear exposure of the pitched roof on the second floor.

MEMBER KATZ: I guess we're at a real disadvantage because you don't give us drawings that show much of this, but is the room to the far south the greenhouse? The one that has the large panels that you see in the photo?

MR. ROTH: Yes. That is our greenhouse.

MEMBER KATZ: And then there is, right in front of the house a portal.

MR. ROTH: Yes.

MEMBER KATZ: And then there's a room between those two rooms?

MR. ROTH: Yes. There is a spare bedroom between those two.

MEMBER KATZ: And that spare bedroom is not blocked by the upper story at all, is it? From the sun?

MR. ROTH: Well, it is partially covered by the second floor. I would guess about half the room's area is covered by the second floor. If we cut holes in the roof light would go into that spare bedroom but at the moment it's blocked pretty much entirely by the greenhouse as far as the southern exposure. There is no window in that.

MEMBER KATZ: It is due west of the greenhouse. Why is it blocked by the greenhouse?

MR. ROTH: We're not talking about the same thing.

MEMBER KATZ: This is the greenhouse and you have two panels there.

MR. ROTH: This is the greenhouse. We have two rows of panels there.

MEMBER KATZ: Right. And then this is the spare bedroom, between the greenhouse the portal. Right?

MR. ROTH: Yes. So there is a window that is blocked, that is shaded until afternoon by the greenhouse.

MEMBER KATZ: I'm talking about roof. Putting panels on your roof. Why couldn't you put more panels on the greenhouse, two rows of panels on the sunroom, three rows of panels on your portal, all facing due south?

MR. ROTH: I guess we could.

MEMBER KATZ: Insulation – what is the ductwork for? What does it do?

MR. ROTH: It moves heat or cold air from the heating plant, the HVAC unit, to all parts of the upper story. So it goes to the bathroom area and three locations in the main room. There's also a large walk-in closet and the air return is in the stairway.

MEMBER KATZ: And how does that – what energy do you use to create the cold and warm?

MR. ROTH: Propane for the warmth and electricity for the cooling.

MEMBER KATZ: Aha. Okay. And so are you going to continue to be using the propane and the electricity?

MR. ROTH: We hope to move away from fossil fuels all together and we would like to more towards a more efficient system, probably ducted mini-splits. At least that's been one thing that's been recommended to us by some of the solar people, so that we could get a greater efficiency in both heating – well, the cooling might be similar to what we have now, but the heating would be substantially better than resistance heating and we would be using then no fossil fuels.

MEMBER KATZ: I'm not real clear on the engineering of mini-splits and probably my colleagues here can help on that. But if you're going to move to that couldn't you have the kinds of units that provide both heating and cooling and get rid of that ugly ductwork all together?

MR. ROTH: Well, we are thinking of the kinds of units that provide heating and cooling, but in order to distribute the heat across our moderately large space with funny angles and shapes it's been recommended that ducts are a better choice than trying to have multiple units, each with their own output in a different part of the room. So we would get rid of the current ducts, perhaps, and certainly the current heating plant, but we would still have a system of ducts to distribute the heating and cooling from the mini-split units.

MEMBER KATZ: You couldn't manage one mini-split on one side of the bedroom and one mini-split on the other side upstairs?

MR. ROTH: We were told, there's still the bedroom and the walk-in closet and we were told that three maybe, but four would be more likely and they thought ducts was a better choice.

MEMBER KATZ: Insulation – what kind of insulation are you planning?

MR. ROTH: I would favor loose fill cellulose, although loose fill fiberglass is a strong contender in my view. They are among the most effective in terms of cost per R-value for the total insulation and they allow very, very good insulation if you have the space to put them pretty deep. They're about 70 percent the insulation per inch as foam, but if we have the option of this pitched roof then we have the space to build up the depth so we could quite affordably get very good insulation values.

MEMBER KATZ: Then the shading issue. In the front of the house it's sort of like three different facades rather than just one and the one sort of south-facing, one southwest facing and one due west facing, it looks like, that must be hot in the summer.

MR. ROTH: Yes, and that's our biggest and most beautiful view is through this giant picture window that faces the very hot sun.

MEMBER KATZ: And have you considered the possibility of a portal in front of that gorgeous view that you could sit outside of an evening and watch the sunset but have the windows shaded from that sun?

MR. ROTH: Well, I think that would be – if we're unable to have the roof that we want and the overhangs which would provide exactly what you suggest in terms of the portal-like shading and seating area, if we can't do that then a portal that does nothing of the other advantages that we're looking for would indeed be a good choice.

MEMBER KATZ: I think your builder has a help on that one.

MR. MIFSUD: Yes. As an architect, I don't know how a portal would be structured up on the second floor, bearing on a first floor roof that's 45 years old and made out of adobe. I doesn't seem like – the vigas that are there now are sagging. Obviously, they weren't designed for deflection. So I don't know how – any portal, the columns would have to go through the first floor roof down and have their own footings in the ground and they'd end up going through the middle of the kitchen and the living room. I don't see how that would work at all, honestly.

MEMBER KATZ: I bet you you could figure it out.

MR. MIFSUD: I've thought about it extensively. One other thing I would like to say is the 29'4" dimension that I just heard is the first time I've heard that and I understand I think where it comes from. It's the maximum height plus ten percent variance plus the three-foot for the panels, if I'm not mistaken.

MEMBER KATZ: That's right.

MR. MIFSUD: And if that was a maximum height they would be able to build to – it may not be the optimum 35 degree but with some futzing of the panels they may not be in the same plane as the roof.

MEMBER KATZ: The maximum roof height is 26'4". You can go higher with panels but not with the top of the roof.

MR. MIFSUD: I was offering an opinion that if we were allowed to bring the maximum roof height to 29'4" then I think it would achieve 90 percent of what they want. That's all I wanted to say.

MEMBER KATZ: Okay. One further question on the solar panels. I would think – and I don't know whether you asked – those panels that track the sun, tracking panels, and I think you have some, don't you.

MR. ROTH: We have to axis trackers up near the –

MEMBER KATZ: Are they quite a bit more efficient?

MR. ROTH: They're said to be roughly 40 percent more efficient. But on the other hand, the trackers add about 40 percent to the cost, so you end up with something of a wash in that case. But we chose to go with them because we wanted to be as efficient as we could be.

MEMBER KATZ: So that also is an alternative for the panels, not just on the south-facing first floor roofs but also tracking panels on the ground.

MR. ROTH: Yes.

MEMBER KATZ: Okay. Thank you. That's all I have.

MEMBER SHEPHERD: Mr. Chair.

CHAIR GONZALES: Mr. Shepherd.

MEMBER SHEPHERD: I want to go back to the solar. Since our first conversation I didn't realize you already have ground-mount solar with tracking. So how much and what is it used for?

MR. ROTH: We have a nominal 10 kW of solar panels. It's used to run the house and we have a woodworking workshop that probably consumes a higher than

average amount of electricity compared to those who don't have a woodworking hobby. We have not kept up with our use 100 percent. For a while we were a little ahead but we have not been ahead during the time, most of the time that those trackers have been in place. We don't attain, of course, the full 10 kW of generation. That's a nominal peak and so our actual generation is at a lower level.

We have purchased an electric car and so our consumption has just increased noticeably because of that and so the new panels, we hope, would take care of the electric car and the heating and cooling needs of the house that we hope to move towards with new heating equipment.

MEMBER SHEPHERD: You have two posts with trackers and a number of solar panels on each post?

MR. ROTH: Yes.

MEMBER SHEPHERD: And are they expandable?

MR. ROTH: So far as I know they are not. I misspoke though. We have three posts. One of them is quite tiny and then the other two are fairly large and the way the structure is built I think a substantial amount of all of the bracing and arms and supports and masts and things would all have to be replaced in order to expand them.

MEMBER SHEPHERD: But it might be more cost effective than a roof mount if you take a look at the numbers.

MR. ROTH: It might be. There's also a question of wind loading. I don't know if they engineered the post and support in a way that could take the added wind loading of a much larger number of panels on the trackers. And I don't know if the tracker hardware, the motors themselves, could handle moving the trackers against the force of winds on the days when wind is an issue. But we could find out about that.

MEMBER SHEPHERD: That's all. Thank you.

CHAIR GONZALES: Okay. Any other questions? I have a couple. If this variance you're asking for, if it was to be approved, I was looking at a letter or the meeting you had with the neighbors and one of the neighbors was asking about the color of the roof and the location of the panels. So what I'm wondering, if this variance is approved would you be willing to accept as a condition that the color of the roof would be non-reflective and the solar panels would be located on the side of the proposed structure, not facing #10 and #12 Dutch Road?

MR. ROTH: Certainly, as far as the second question. I don't really know what it means to be non-reflective in terms of a roof but I suspect we can accept that. I would guess it would be colored like most of our neighbors' roofs are.

CHAIR GONZALES: That's' one option.

MR. ROTH: Yes.

CHAIR GONZALES: Okay. If there's no other questions I need to open this up for a public hearing. Anybody out there that wants to speak in favor or against this? You may have a seat.

MR. ROTH: Thank you for taking the time to listen to me. I really appreciate your granting me that amount of time and that level of detail.

CHAIR GONZALES: Thank you. There appears to be no one here that wants to talk for or against it. I'm going to close the public hearing. What's the pleasure of the Commission? Any discussion? Mr. Katz.

MEMBER KATZ: Mr. Chair, I would find that there are a large number of alternatives that would not require these variances. There are alternative materials for insulation. There are alternatives to replacing the current heating system or air conditioning system, I forget which one, that they're planning to replace anyway that would allow them to get rid of the ductwork on the roof and make putting rigid insulation there much easier to do. That there are alternative ways to shade the west facing windows on the second floor with a portal or other shade device that could go to the parapets and not be on the top of the roof below, as far as the supports of the portal or shade structure there. And that there are numerous alternatives for the solar collectors on the first floor roofs, on poles to be yet more efficient with tracking devices. And so with those findings, I would like to make a motion if I can.

CHAIR GONZALES: Frank.

MEMBER KATZ: And I would move to follow the recommended decision from the Hearing Officer and deny the application for the exceptions to go that height.

MEMBER SHEPHERD: I second that.

CHAIR GONZALES: All right. We have a motion and we have a second.

The motion passed by unanimous [5-0] voice vote.

VIII. B. <u>CASE #18-5220 Phyllis Perry Variance(s).</u> Phyllis Perry, Applicant, Don Briggs, Engineer, request variances of Chapter 7, Section 7.17.10.4.1, [Roads and driveway shall not be designed or constructed on slopes of over twenty-five percent (25%)], Chapter 7, Section 7.17.10.4.2, [More than (3) isolated occurrences of up to one thousand (1000) sq. ft.], Chapter 7, Section 7.11.3.5.1, (All development, including roads, buildings, parking areas, and driveways shall be located so as to minimize areas of cut and fill), Chapter 7, Section 7.11.3.5.2, (Cut and fill slopes combined shall not exceed 20 feet.) Chapter 7, Section 7.11.11.5.1 (Off-Site Road Improvements.) The property is located at 45 Mariposa Rd. within, Section 9, Township 11 North, Range 7 East (Commission District 3) SDA-2

MR. MANZANARES: Thank you, Mr. Chair. On December 13, 2018, this application was presented to the Hearing Officer for consideration. The Hearing Officer recommended approval of all four variances requested by the applicant as memorialized in the findings of fact and conclusions of law written order. Both staff and the Hearing Officer recommend approval for all variances requested from the applicant subject to the conditions as contained in the report.

The Hearing Officer found that the evidence presented by the applicant for the four requested variances established and met all the variance criteria for the Sustainable Land Development Code.

At the Hearing Officer meeting, the applicant and the applicant's engineer stated that they had concerns regarding some of staff's recommendations: conditions # 3, 5, 10 and 11. Staff has revised these conditions as contained in the report and has left the

conditions pertaining to fire emergency access and road improvements to be at the recommendation and discretion of the Santa Fe County Fire Marshal.

The Fire Marshal completed a site inspection after the Hearing Officer meeting and has provided an updated aerial showing approximate turnout and turnaround locations for the project. That's on Exhibit 19. The final locations of these turnarounds and turnouts will be discussed and designated prior to and during construction by the Fire Marshal and the applicant.

Staff would like to better reflect the comments and add a clarification regarding road improvements per the Fire Marshal's recommendation from the aerial provided. Staff also recommends that the Planning Commission modify condition #8 to state: The road width from the intersection of State Road 344 and Lower Mountain Road to the driveway intersection on Mariposa Road shall be a minimum of 12 feet wide with vehicle turnouts and turnarounds as approved by the Fire Marshal. The driveway beginning at the intersection of Mariposa Road, through the Applicant's property shall be a minimum of 14 feet wide with turnouts and turnarounds as approved by the Santa Fe County Fire Marshal.

Mr. Chair Gonzales, may I enter the remaining conditions into the record as stated in the report?

CHAIR GONZALES: Yes, you may.

[The renumbered conditions are as follows:]

1. The Applicant must provide stepped retaining walls designed by a New Mexico Professional Engineer for all areas where fill slopes exceed 3:1 and where cut slopes exceed 2:1. As an alternative, a geotechnical report may be submitted for approval by the Administrator which verifies retaining walls are not needed and the stability of the rock and soil in those areas.
2. The Applicant must present a reclamation plan upon permitting to ensure that as much disturbance as possible is reclaimed and revegetated.
3. (Previous Guardrail Condition removed)
4. A financial guarantee must be submitted for and approved by Staff before the commencement of construction.
5. Construction must be completed by a licensed contractor. Excavator and the projects engineer must be present on site during the significant 24' by 80' cut and all other cuts that exceed 10' during construction
6. The boundaries of the development area shall be clearly marked on site with limits of disturbance (LOD) fencing or construction barriers prior to any grading or clearing and approved by Staff before starting construction.
7. The Applicant will be limited to build a single story residence that does not exceed 14' for a flat roof or 18' for a pitched roof.
8. The road width from the intersection of State Road 344 and Lower Mountain Road to the driveway intersection on Mariposa Road shall be a minimum of 12 feet wide with vehicle turnouts and turnarounds as approved by the Fire Marshal. The driveway beginning at the intersection of Mariposa Road, through the Applicant's property shall be a minimum of 14 feet wide with turnouts and turnarounds as approved by the Santa Fe County Fire Marshal.

9. Driveway slope shall not exceed 15% in any place throughout. Off-Site Private Roads leading to driveway shall not exceed a grade of 15% per Santa Fe County Fire Marshal.
10. Emergency vehicle turnouts, meeting the dimension of the Santa Fe County Fire Code, shall be placed approximately every 500 feet throughout the driveway length to be determined and approved by the Fire Marshal.
11. Two emergency vehicle turnarounds, meeting the dimensions of the Santa Fe County Fire Code, shall be placed within the driveway on the applicant's property or adjacent to the Applicant's property within the access easement as determined and approved by the Fire Marshal. One turnaround shall be placed within 50' to 150' of the primary dwelling.
12. The owner shall comply with the requirements of the Santa Fe County Vegetation Management Plan regarding all proposed structures.

I now stand for any questions at this time, Mr. Chair.

CHAIR GONZALES: Okay. Does the Commission have any questions of staff? J. J.

MEMBER J. J. GONZALES: I've got a couple of questions. I read the report and we had a – I think we have conditions or we had questions on conditions 3, 5, 10 and 11. Upon reading the discussion from the Hearing Officer and subsequent information that the applicant provided, were conditions 3, 5, 10, 11 satisfying to staff's requirements?

MR. MANZANARES: Commission Member Gonzales, staff has agreed to remove condition 3 of the original presentation from the Hearing Officer. That was a condition regarding guardrails along the driveway. The applicant's engineer has provided an updated diagram of the proposed cut. I believe that's going to be Exhibit 18 of your packet, NBB-40. Staff has reviewed that and determined that guardrails will not be required for this project.

MEMBER J. J. GONZALES: What about condition #5?

MR. MANZANARES: Condition #5 if I'm not mistaken pertained to the fire –

MEMBER J. J. GONZALES: It was the licensed contractor.

MR. MANZANARES: Oh, the licensed contractor. Yes. The intent on that was for the engineer to be present during the steep cuts presented with this project, in particular the 24' X 80' cut and all other cuts exceeding 10 feet. We would like the engineer onsite for those cuts to supervise and make sure –

MEMBER J. J. GONZALES: But you agreed the engineer didn't have to be onsite all the time.

MR. MANZANARES: Yes. We've revised that condition and it is not revised in the report. He only needs to be present during the significant cuts and not the entire construction.

MEMBER J. J. GONZALES: What about condition #10? [#11 in renumbered conditions.] The turnarounds of the Fire Marshal.

MR. MANZANARES: Yes. There again we are going to have that at the Fire Marshal's discretion. We have approximate locations per the exhibit provided to you. The Fire Marshal designated those with the natural topography of the land and the

site inspections that were conducted that will ultimately be designated during construction. But the aerial provided does show approximate locations of where those need to be.

MEMBER J. J. GONZALES: So it went from exactly 500 feet to an approximate –

500, 600 feet? Give them a little leeway on that?

MR. MANZANARES: Yes. That's per the Fire Marshal. I don't know if you'd like to speak for that. But basically, due to the terrain, to put an exact number at 500 it could further disturb slopes and we want to put them in naturally occurring –

MEMBER J. J. GONZALES: I don't want to interrupt you but I would like the Fire Marshal to come and address that.

MR. MANZANARES: Absolutely.

MEMBER J. J. GONZALES: He sits here for a long time and we want to hear him give us an explanation.

JAOME BLAY (Fire Marshal): Mr. Chair, Planning Commissioner J.J. Gonzales, he is more eloquent than me though. Could you please repeat your question?

MEMBER J. J. GONZALES: Yes. The question was that at first it was required that turnarounds, turnouts, be every 500 feet and they kind of came back and said maybe at 500 feet it wasn't feasible there. So you allow them to do it within 500 feet, approximately, due to terrain problems.

FIRE MARSHAL BLAY: Mr. Chair, Planning Commissioner Gonzales, that is correct. Originally when the planning review fire inspector sent a letter back to Land Use he gave me an approximate number just because we didn't know exactly what the terrain looked like. And once we did a site visit I realized that there were some areas that were already naturally occurring where they could have that turnout. Also we took into consideration slope, curvature of the road. We took into consideration line of sight. So some areas are going to be less than 500 feet and some areas may be more than 600 feet but ultimately it's going to serve the Fire Department's purpose.

MEMBER J. J. GONZALES: Okay. That's good. And the slope of the driveway, it's like a 3,100-foot driveway. Now the Fire Marshal says it can't exceed 15 percent. Are there areas in that driveway that exceed 15 percent, or are you satisfied with the way they designed it?

FIRE MARSHAL BLAY: Mr. Chair, Planning Commission Gonzales, I believe there are some areas that are in excess of 15 percent and the driveway cannot exceed 15 percent.

MEMBER J. J. GONZALES: Thank you very much.

CHAIR GONZALES: Mr. Fire Marshal, stay up there. I have a question for you now that you're up there. Will the Fire Department be able to respond to an emergency at this location? And if not, what are the liabilities?

FIRE MARSHAL BLAY: Mr. Chair, we should be able to respond to an emergency in this location if they build the driveway we are requiring it. And another reason why they are required to have a sprinkler system is because potentially a tanker may not be able to make it out there but an ambulance or a brush truck should be able to make it out there in case there's a medical emergency.

CHAIR GONZALES: So the house will be required to be sprinklered?

FIRE MARSHAL BLAY: Correct.

CHAIR GONZALES: Thank you. Okay. Any other questions of staff? I have a couple. A question I have, would approval of these proposed variances be acknowledging the buildable envelope as shown?

MR. MANZANARES: Yes. The site in particular is interesting. It's a bench if you will. Steep, levels off, then there's a hill along it as well. The area which they're proposing, you can see on the slope analysis does show that it's fairly flat where they plan on building the residence. And staff has determined that that is the best buildable area for the site. It's basically the only flat part of the site.

CHAIR GONZALES: Okay. And the reason I'm bringing these up, these questions, is because I have concerns about when you approve a driveway before the house it's kind of odd. You usually want to approve the buildable area before the roadway, or at the same time. So another question I have, has the staff seen a copy of the house and floor plans?

MR. MANZANARES: There again we have not. Similar to the previous case we do not want to put the owner to that expense. The owner has agreed to a 14-foot high height restriction with a flat roof and 18-foot on a pitch. No preliminary plans have been submitted to staff at this point.

CHAIR GONZALES: Okay. One concern that I have is that, okay, we approve this driveway and it goes up to the top and it goes up to the elevation, to a certain elevation at the top of the hill. I'm concerned that once we have that road down, and they want to come out and dig down and dig out the top of the hill. So I'm really concerned. I would like to tie the top of the elevation at the end of the driveway to the finished floor of the house within 12 to 18 inches.

MR. MANZANARES: Mr. Chair, if that's to you discretion you may condition that as an approval condition.

CHAIR GONZALES: Has there been any discussion about that previously, about where the finished floor is going to be in relation to the elevation at the end of the driveway?

MR. MANZANARES: Not by staff, because there again we just have an approximate location of buildable area. It is tucked far away from the ridgeline itself, so I don't think we've had that discussion.

CHAIR GONZALES: Maybe the engineer can elaborate more on that after a while.

MR. MANZANARES: Absolutely.

CHAIR GONZALES: Okay. Is this application going to require trees for screening the driveway? Or would that only apply to a ridgetop lot?

MS. LUCERO: Mr. Chair, that would only apply to a ridgetop lot. Correct.

CHAIR GONZALES: Okay. I answered my own question. Thank you. Another question I have, are we practicing putting in cisterns in lieu of a pond? I notice that the application is showing two cisterns. I don't see any ponding area. Usually what we did in the past is you'd have the ponding required under terrain management and then you'd have the cisterns separately. So I have questions about that.

MS. LUCERO: Mr. Chair, that's correct. They are required to install the cistern and then a pond would be for any overflow from the cistern.

CHAIR GONZALES: So I guess my concern would be that if there's a 100-year storm event and the cisterns were full, there's somewhere where the water can go to to comply with the 100-year storm event.

MS. LUCERO: Mr. Chair, when they submit the application for the actual permit then they will be required to design detention ponds in addition to the cisterns and at that time we'll look at the calculations to make sure that there's capacity.

CHAIR GONZALES: Thank you. Okay. Any other questions? Is the applicant ready to make his presentation? Please come forward.

[Duly sworn, Don Briggs testified as follows:

DON BRIGGS: Mr. Chair, Commissioners. My name is Don Briggs. I'm the principal of Don Briggs Engineering and I'm assisting Phyllis Perry here with a site development plan for her property in the San Pedro Mountains. It is a fairly difficult property as you've probably seen from the slope analysis that's presented in your packet there. We had a fairly difficult time picking a road alignment. We actually looked at four different alignments and the one we came up with does have a significant cut in order to meet the Fire Department's requirement for the 15 percent grade.

There are additional issues with the roadway in that there's a drainage channel that runs right alongside the roadway so we are proposing a small channel to keep that water out of the road. The road is about 3,100 feet long and so it's not short. It's going to be expensive and we've worked through the process with staff and I believe they've come up with a site plan that the Perry's can work with with the proposed variances in place that we have requested. With that I'll stand for any questions.

CHAIR GONZALES: Okay. Does the Commission have any questions of the applicant? Okay, I have a few questions. I noticed that you submitted a drainage narrative which was pretty good but I would like to see an overall grading and drainage plan including the roadway identifying the locations of your proposed improvements, also indicating locations of roadway section transitions such as crowns and super-elevations by stationing. What you submitted is pretty good but I don't see – if I was an inspector I'd have a hard time inspecting the locations where those areas would be at.

MR. BRIGGS: Okay. Perhaps I can explain that to you, why that's actually not – there are cross-sections on the plan and profile for the road. However, there is essentially one typical cross-section. The reason I did that is because most of the flow that crosses or gets to this road is overland flow. There's no arroyos essentially that cross this road. And so I'm proposing to have that water just continue overland across the roadway. So there's no crown, no bar ditch on the upstream side, no bar ditch on the downstream side.

If there are areas that will require that and there is in the cut area we'll have to have bar ditches there because of the amount of water that's going to come down through that cut, but that will eventually get into the small channel that we're proposing. So if you look at the cross-section that I have, I just have a two percent cross –

CHAIR GONZALES: You're talking about Exhibit 18?

MR. BRIGGS: I'm not sure what the exhibit number is in your packet. On the plan and profile there's a typical cross-section. On the upper right

MS. LUCERO: Mr. Chair, I believe it's in Exhibit 4.

CHAIR GONZALES: Yes. I see it. Okay. Continue.

MR. BRIGGS: And so that's essentially what I'm proposing is to just get the water across the road in an overland flow manner and not concentrate it.

CHAIR GONZALES: If you do that isn't the water going to erode the road surface?

MR. BRIGGS: No.

CHAIR GONZALES: I don't understand your concept.

MR. BRIGGS: Okay. The concept is that the water stays shallow and does not gain velocity. So it continues as a shallow flow across the road. If you put a bar ditch in and collect it and concentrate it then you have to do culverts and things like that and that's – I've walked the road and looked at the surveys and stuff and I think this would be a good opportunity to actually do this, because there are no really concentrated flows that impact the road at this point in time.

CHAIR GONZALES: But if you have a 15 percent grade coming down the road you're going to have some drainage coming down both ends of the road, down the middle of the road, or if there's bar ditches now you're going to have the water coming down.

MR. BRIGGS: As long as the road does not stop the flow of water crossing it it won't get concentrated. It will continue just across the road. It will go down the road also but I don't believe it will be an erodible velocity.

CHAIR GONZALES: I do have concerns about that. I don't see a geotechnical report. The drainage narrative does not mention the 15 percent grade or any mitigation efforts to stabilize control or slow down the stormwater – check dams, all the basic engineering procedures.

MR. BRIGGS: And the reason that's not in there is because I'm hoping the water will just not have to be concentrated. If it has to be concentrated then you'll have to have bar ditches, check dams that makes the disturbance larger because of the bar ditches just causes additional problems. If you look at the road now it is very similar to what I would propose, although of course it's all rocks.

CHAIR GONZALES: If there's a lot of rock out there, the impervious surface is going to add a lot more runoff before it percolates at well. I really do have concerns about this plan. Let's go on to another question I have. I don't want to – okay, so based on that section you were talking about, the surface of the roadway is going to be six inches of basecourse, correct?

MR. BRIGGS: Correct.

CHAIR GONZALES: Why was the cabin not shown on the proposed engineering plans? I'm curious.

MR. BRIGGS: The home site has not been developed yet. In talking to the client, she is thinking of a single story, slab on-grade home, probably around 2,000 square feet. But there is no design yet for it. They're just hoping to get through this process to see if they are actually going to be able to build.

CHAIR GONZALES: What difference in elevation are you thinking about with the end of the driveway and the finished floor of the house?

MR. BRIGGS: I haven't actually looked at the – the driveway is right. It's about at 7,800 feet and also the home site is at 7,800 feet. So there'll be just very little difference I think. So I don't think they're proposing to elevate or excavate. It's just kind of a standard home site.

CHAIR GONZALES: Also, without a soils report you're not really sure if you're going to have to over-excavate for the pad as well, correct?

MR. BRIGGS: That is correct. Again, we're hoping to get this approval, which requires a soils report as a condition of approval. Once we get this we'll go ahead with that work.

CHAIR GONZALES: Okay. Anything else from anybody here? No? Okay. I need to open up the public hearing. Anybody out there want to speak for or against this project? I don't see anybody out there so I'm going to close the public hearing. And what's the pleasure of the Commission? Mr. Katz.

MEMBER KATZ: I would like to note how much I appreciate the work staff did on this, worked with the applicant. It was very pleasing to see that the issues came out and staff worked through them and I'd like to thank staff for that and compliment the applicant or working with staff so well.

CHAIR GONZALES: All right. Any discussion from the Commission? Nathan.

MR. MANZANARES: Chair Gonzales, staff would just like to clarify condition #1. I think it would alleviate a lot of the concerns that you have as far as the geotechnical. The way it's stated right now it's an alternative in lieu of retaining walls. I don't know if you want to discretion and condition that a geotechnical be provided, because right now the way it's conditioned it is an alternative.

CHAIR GONZALES: Yes. If we were to approve this I'd probably want to put some condition where I would like to maybe add in Exhibit 18 as a condition of approval because I want that done. I'd like that section. I do have concerns again about the lack of a crown or lack of a super-elevation on the road section.

MR. MANZANARES: I wanted to bring that to your attention, Mr. Chair.

CHAIR GONZALES: Okay. Thank you. Okay. Do we have any motions? Discussion from the Commission on this project? Okay. I will make a motion. I would like to make a motion on Case SVAR #18-5220 to table for more information, specifically on some of the issues I mentioned today. I'd like to see more engineering on this roadway. I really have heartburn trying to approve a driveway without a buildable site. In the past I've had issues where I think Paul was with me on one project. We had approved a driveway and then when we approved the driveway then the property owner came in and said, well, you approved the driveway then we get this buildable site right over here at the end of the driveway. So I want to avoid issues like that.

Mr. Katz, did you have something to say?

MEMBER KATZ: Yes, I'm a little puzzled because from looking at the topographic map it looks like there is this flat area right at 7,800 feet and that's where the driveway ends up and that's where the house is going to end up. So I'm not seeing the problem, is my problem.

PAUL KAVANAUGH (Building & Development Supervisor): Mr. Chair, we've gone out to the site and we feel that the driveway will end very close to finish floor of the structure. We're fairly confident of that. The only heartburn I would have is we don't know what kind of soils are there, so if there were to be some over-excavation, we don't know that without a soils report. But from what we've seen from the preliminary walk-throughs, they appear to be within a foot.

CHAIR GONZALES: Okay. Thank you. Anybody else have any other input? I'll tell you what, that being said, I'll retract my motion, and I'm going to make a motion for approval with all the conditions, but I'd like to add a couple conditions.

I would like to add a condition that the end of the roadway and the finished floor of the house, the elevation should be within a foot to 18 inches. I would also like to see some plans – an overall grading and drainage plan including the roadway identifying the locations of the proposed improvements on the drainage narrative, also indicating locations of the roadway section transitions such as crowns and super-elevation by stationing.

I'd also like to add a condition to provide a geotechnical report. Is that on there already? No. So I'd like to have a condition on a geotechnical report with additional mitigations, maybe some check dams and the bar ditches where the 15 percent slopes are at. And last of all I'd like to add a condition accepting Exhibit 18 as a boilerplate but with the exception of the roadway cross slope which will vary from crown to super-elevation. Does that make sense to you guys?

MR. KAVANAUGH: If you could repeat that last Exhibit 18 one. I wasn't clear on it.

CHAIR GONZALES: Yes. I'd like to have Exhibit 18 as a condition of approval. I like that section. The only thing I don't agree with is the roadway cross slope.

MR. KAVANAUGH: So Exhibit 18 will be constructed as is with the exception of the crown or the super-elevation?

CHAIR GONZALES: Correct. Correct. More for what I like about it, what I like best about that is the cut slopes and the way they're putting the retaining walls on there. I like that. And then I would just like – Vicki, I have this note I put over here, clarify all proposed variances. Granting of these variances does not exempt the two to one cuts or three to one fills required by the code.

MS. LUCERO: Mr. Chair, you said you want to add that as a condition or you're –

CHAIR GONZALES: Yes. Let's add that as a condition.

MEMBER SHEPHERD: Mr. Chair.

CHAIR GONZALES: Mr. Shepherd.

MEMBER SHEPHERD: Were there any of the additional conditions you propose that require review by the Board before approval or are you suggesting that staff can approve it as part of the conditions?

CHAIR GONZALES: I'm suggesting that staff can approve it as part of the – when the permit comes in. Does that make sense?

MS. LUCERO: Yes, Mr. Chair. I think we're good.

CHAIR GONZALES: Okay. Do I have a second on my motion?

MEMBER SHEPHERD: I'll second that.

CHAIR GONZALES: Okay.

The motion passed by unanimous [5-0] voice vote.

CHAIR GONZALES: Okay, so it passes with conditions and the additional conditions. Thank you for coming.

C. Petitions from the Floor

None were offered.

D. Communications from the Committee

Member Katz welcomed Commissioner J. J. Gonzales, who thanked the other Commissioners and staff. He said he appreciated having a Hearing Officer.

Commissioner Shepherd received confirmation that the departing Commissioners would receive certificates of appreciation.

Chair Gonzales thanked staff for their assistance during his first year as chair.

E. Communications from the Attorney

Mr. Ames also welcomed the new member and noted that the attorneys take turns at the Planning Commission. He said he would convey the concerns about the final order.

F. Matters from Land Use Staff

Ms. Lucero said the BCC has not acted on any Planning Commission decisions. She distributed the proposed mining regulations which are currently under public review and will probably be before this group in March.

G. Next Planning Commission Meeting: February 21, 2019

H. Adjournment

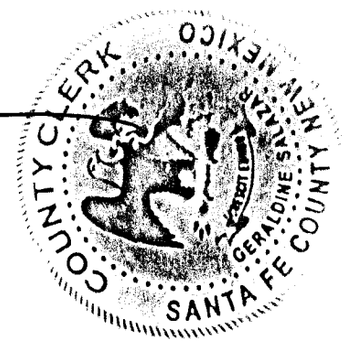
Having completed the agenda and with no further business to come before this Committee, Chair Gonzales declared this meeting adjourned at approximately 5:47 p.m.

Approved by:

Charlie Gonzales, Chair
Planning Commission

ATTEST TO:

GERALDINE SALAZAR
SANTA FE COUNTY CLERK



Submitted by:
Debbie Doyle, Wordswork