

#### **4 April 20222**

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#### **RE: Response to 32 Questions for South32 (dated 21 March 2022)**

Greetings,

Thank you for reaching out for further clarification on our proposed routes, transport, and land transfer agreement. These remain important conversations for us to continue having with the community, and I'd like to begin by addressing the thematic concerns expressed in your letter.

As you know from our ongoing public engagements, in order to conduct early construction and production for the Hermosa Project, South32 plans to construct a temporary road. The proposed route would begin at the Hermosa Project site, enter existing Harshaw Road, and follow the road for approximately 8 miles before turning north near the existing Harshaw Road Bridge No.1 using existing County right of way. The route would then intersect with SR82 after approximately 1.2 miles; this intersection would be located at the current Cross Creek Road/SR82 intersection. Total construction is anticipated to take approximately 18 to 24 months.

South32 will comply with all Santa Cruz County and Arizona Department of Transportation (ADOT) requirements related to connecting to existing rights of way, including SR82 and Harshaw Road. The proposed route would be a non-exclusive easement, and residents in the area who currently use the road to access their homes and property will retain their access.

South32 and Santa Cruz County have developed a proposed agreement to transfer 134 acres of South32 private land to Santa Cruz County for use as an open space park, with South32 retaining an easement for this temporary road. The intent is to use the road until South32 can construct a permanent route south of town in Flux Canyon once permits for use of National Forest Service land are in place. The park designation provides assurance to the community that nothing else will be constructed along the road, such as laydown areas, warehouses, or park-and-ride lots.

Additionally, certain park features, such as trees and open space will serve as a buffer between the road and nearby residents.

Our number one priority at South32 is safety, and the design of the proposed road emanates from that priority, as will our use of the road—including low-speed limits and other design features. We are also strongly committed to the local community, of which we are a part, and will be continually responsive to concerns. Many features of the road and transport are being designed to ensure we address them to every extent possible. South32 also has a strong commitment to sustainability, which is intended to produce materials for low-carbon technologies, so we are designing the mine to meet a low-carbon footprint, including electric transport vehicles for the proposed road and possibly renewable power.

Regards,



Pat Risner  
South32 Hermosa Project President  
[pat.risner@south32.net](mailto:pat.risner@south32.net)

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Responses to your specific questions:

1. A map has been posted.
2. Refer to the map, which shows that the proposed road would connect to Harshaw Road (which is existing County right of way).
3. Vehicles would enter and exit off Harshaw Road at the new route intersection with Harshaw. Based upon existing and proposed traffic volumes and County guidelines, turn-movement auxiliary lanes are not supported at this intersection. However, additional traffic studies that we will conduct in the year ahead may recommend auxiliary lanes and/or use of a stop-control at this intersection to address safety issues. We do not anticipate the need to widen Harshaw.
4. For the connection to SR82, we will follow ADOT requirements. We anticipate needing acceleration and deceleration lanes, but that will be determined by ADOT and would be in the existing ADOT right of way, we have not applied for an ADOT encroachment permit yet; we will pursue this upon completion of the agreement.
5. The proposal is a non-exclusive easement. Existing easements of record will not be impacted. Others in the area who use Cross Creek to access their homes and property will still have access.
6. We plan to have concentrate trucks use the road, while our commuter buses, light vehicles, and most delivery vehicles can continue to use roads in the Town of Patagonia under the Town ordinance limit. Large deliveries and heavy trucks delivering during the construction period will use the proposed road.
7. South32 will complete additional traffic studies. Concentrate truck estimates were presented by South32 during the Santa Cruz County Board study session. During construction and operation, we are taking steps to reduce the number of vehicles on the road, including planning for modular construction, assembling off-site as much as possible and then

transporting one larger load to site. For employees, we are planning for park and ride locations outside Patagonia with bus transportation to and from the Hermosa Project site.

8. We expect the loaded concentrate trucks to have a weight of less than 80,000lbs.
9. The proposed road, as outlined in the draft agreement posted by the county, will have 12ft travel lanes, 2-3' shoulders, and a stabilized base to manage dust.
10. Santa Cruz County has previously evaluated the load capacity for various structures along Harshaw Road and the Harshaw Road Bridge #2 (ADOT Str. 9001) will need to be upgraded. This will be undertaken at South32's expense.
11. Our projected 18- to 24-month construction schedule includes utilities relocation and post-construction cleanup. The remediation plan for the road will be finalized after obtaining public input on desired recreation or open space conservation in the area.
12. The proposed land is outlined in the map and the proposed draft agreement.
13. The intent is to use the road for initial construction and production traffic, and the draft agreement outlines that the temporary easement will terminate 24 months after receiving authorization to construct an alternate route.
14. A map has been posted.
15. The agreement outlines the closing terms, typical of real-estate transactions, with dates for inspection and closing periods. Regarding the date for decommission of the road, please refer to question 13.
16. A map has been posted.
17. Should we be prevented from constructing the proposed long-term route, South32 will reevaluate transportation and traffic plans and resume consultation.
18. Yes
19. The proposed land transfer and park dedication uphold our commitment to the Cross Creek area road being temporary.
20. N/A
21. Yes, which is estimated at \$7,500 annually, but the amount to be invested in park amenities as well as the improvements to the land will exceed the annual property tax amount.
22. We are in discussions with Tesla regarding their commercial transport vehicles. As stated in the presentation to the Santa Cruz County Board of Supervisors on March 30, 2022, the exact size of the truck and rotainer is yet to be finalized but is roughly 20 feet long and 8 feet wide, similar to trucks currently operating on these highways. Other specifications can be estimated using the ADOT Traffic Engineering Guidelines and Processes that we will follow, which estimate braking distances and acceleration distances based on speed.
23. Concentrate trucks will be carrying zinc, lead, and silver concentrate and beneficiated manganese product in solid form. We plan to use reinforced waterproof sealed retainers designed for mining applications to transport and would be fully responsible for clean-up in the highly unlikely event of an accident causing material to be released.
24. We will relocate and/or protect in place any utility lines as required.
25. Yes, South32 will upgrade the Harshaw Road Bridge #2 (ADOT Str. #9001) at our expense.
26. In addition to having a complaint system for the public to report speeding or other traffic concerns, we actively manage our traffic on Harshaw Road and have standards for vehicle operation and training to ensure drivers are mindful of others on the road. We are exploring technology options for further safeguards.

27. We are aware of the area wildlife, we will include it in our upcoming traffic studies, and will follow all applicable rules and regulations. We are also studying signage and notification systems that can be used in the area to warn drivers of wildlife.
28. We will work with the County and ADOT to meet all requirements for intersections. The land transfer and assurance of open space or a natural recreation park provide certainty for adjacent residential property owners.
29. Utilities can be relocated or protected in place at our expense, as needed.
30. The Cross Creek area road can be considered as secondary access or all-weather access for the San Antonio neighborhood for the duration of the temporary easement.
31. Dust and noise can be managed with road design and with the stabilized treated base, low speed limit, and the use of electric vehicles. Other design features, such as the reduced earthwork, and park features can damper light pollution. The agreement will include a provision restricting lighting fixture uses to those sensitive to dark skies, and safety will still be paramount.
32. Referring to concentrate traffic only, routing concentrate traffic east initially on SR82 then north on SR83 would result in an average 4% increase in vehicles on the road. The traffic numbers we've projected spread traffic over a 24-hour period. We can research adjusting our traffic during peak travel times, and this will be further evaluated during the additional traffic studies and ADOT encroachment process.

Mr. Patrick Risner  
President, Hermosa Project at South 32  
2210 E. Ft. Lowell Road  
Tucson AZ, 85719

March 21, 2022

Dear Mr. Risner,

We are writing today to formally request answers to a series of questions related to the initial transportation route proposed by South 32 to move mineral concentrate from the Hermosa mine site in the Patagonia Mountains to the Tucson rail station. Most of these questions should be familiar to you as they have been asked many times, by many people, in different settings. The public deserves answers to these questions. None of them addresses proprietary information. Many of the answers will be required by ADOT and other permitting agencies. The answers are also critical for Santa Cruz County in its consideration of a proposed easement on county land to South32 for completion of the "Cross Creek Connector" ("CCC"). We ask that you provide written answers to the questions below by April 16, 2022, c/o Linda Shore, P.O. Box 623, Patagonia, AZ 85624.

We have grouped the questions into four interconnected areas:

**The initial "temporary" route from mine to market**

1. Can you provide a detailed map of the entire proposed temporary route?
2. What is the exact proposed route of the road, in particular how the road exits the mine, the specific location of the CCC road including how it joins up with Harshaw Road and how it joins up with SR 82?
3. How would vehicles enter and exit off Harshaw Road to the CCC road? How would left turning vehicles be managed? Will Harshaw Road have to be widened to accommodate center turning lanes?
4. How would vehicles enter and exit SR 82? For example, will there be acceleration and deceleration lanes, a center turning lane? Has South 32 applied to ADOT for an encroachment permit for access to SR 82?
5. Since the CCC road will be private, how will residential and commercial property owners that surround it access their homes and businesses?
6. Who will be travelling on the CCC Road? Mineral concentrate trucks? Construction trucks and other support and service vehicles? Buses transporting workers? Others?
7. What are the expected number of trips per day for each type of user on the road? What is the total expectation of use on the road prior to the mine being in production? Once

the mine is fully operating? Will South 32 do a trip generation study to fully allow the County and ADOT to understand the vehicle, bus, and truck generations?

8. What are average weights of each type of user vehicle, in particular the mineral concentrate trucks when full?
9. What standards will the road be built to? How wide will the road be? How will dust be managed?
10. Will there be new bridges along the route or will trucks travel through washes? Are all bridges along the route from the mine currently capable of carrying the volume and weights of traffic generated? If not, which will be upgraded or replaced, and at whose expense?
11. The projected 18-24 months for road construction suggests a permanent road. Once the road is decommissioned for the "permanent route", what is the remediation plan to remove the road and what will be the standards for re-habilitating the road way?

**Proposed easement across county land granted to South 32 by Santa Cruz County in return for a land donation**

Santa Cruz County is currently considering granting a private temporary easement to South32 in return for donation of 70 plus acres of land currently owned by South32. The questions regarding this proposal are:

12. Specifically what land is covered in the proposed temporary easement?
13. What is the definition of "temporary"? Arizona state regulations for right of ways require temporary easements to have a time frame attached to them. If the time frame on the temporary easement runs out, do you expect to apply for renewal?
14. Specifically what land is proposed to be donated by S32 to the County?
15. If it is the land that the private CCC road will be built on, when is that donation proposed to occur? What is the projected date for the decommission and rehabilitation of the private road when a different route is in place?
16. If the proposed land donation is not the road itself, but some other land, what parcels does it include and when is the donation proposed to occur?
17. What happens if the proposed "permanent" route for transport of mineral concentrate cannot be completed? Does the mine expect that in this situation the proposed "temporary" route through CCC will become the "permanent" route?
18. Does South 32 currently own 100% of the land required to build the CCC road?
19. If yes, why would they need an easement to build a private road on their own land?
20. If no, does the South 32 require an easement through county owned land to complete the road?
21. Would donation of the proposed 70 acres relieve South32 of paying property taxes on the donated land?

## **Safety Concerns**

There are major safety concerns: (a) along Harshaw Road, and in the connection to the proposed CCC; and (b) along SR 82, whether the S32 trucks and other traffic turn right onto SR 82 to SR 83 or turn left onto SR 82 through the Town of Patagonia and to Rio Rico and Nogales. These concerns are for residents, visitors, as well as for wildlife in a critical wildlife corridor. Our questions are:

22. In order to assess the dangers posed by the ore-carrying trucks (such as acceleration, stopping distances, cut-off sight lines), we need the specifications of the trucks – what will be their height, width, turning radius, weight when loaded, stopping distances and acceleration speed?
23. What type of concentrate will they be carrying – solid, liquid? What is the toxicity of the contents if spilled in an accident? Who would pay for the clean-up?
24. Has South32 analyzed the potential safety issues associated with damage to a gas pipeline or electric utility lines that heavy trucks could impact at the intersection of Harshaw Road and the proposed CCC?
25. Has South32 assessed the capacity of the clearly crumbling bridge on Harshaw Road to handle a significant increase in heavy truck traffic and other traffic? Will you replace the bridge at the mine's expense?
26. Harshaw Road is heavily used by residents, commercial livestock trailers, visitors on foot, in cars, and many bicyclists. How does South32 propose to mitigate the risk for these users?
27. Has South32 assessed the proposed use of CCC on the critical wildlife corridor that state and federal agencies have recognized just north of CCC, particularly the effect of truck and other increased traffic turning right on SR, which would cut right through the heart of this corridor?

## **Impacts on public and private landowners near the route**

28. The large volumes of tractor trailers and other mine related traffic 24/7 will not only create traffic problems at intersections but also multiple safety concerns, noise, and dust. All these factors will have a negative impact on residential property values for homeowners along the route. How will these homeowners be compensated for the reduction in their assets?
29. How will the Red Rock Acres well site and waterlines be protected from damage in the course of road construction and operation? Will South32 accept liability for any damage caused?
30. Will homeowners and businesses in the San Antonia neighborhood have access to the private CCC road? How?
31. How will dust, noise, and light pollution be mitigated for homeowners and businesses that are proximate to the proposed CCC?

**32. How will the high volume of tractor trailers and other mine related vehicles impact traffic on Harshaw Rd, SR 82, and SR 83? How will a significant increase in traffic effect travel times for local residents and others regularly using these state roads? How will South32 monitor this and what approaches will you consider to address any significant increases in travel times?**

**Thank you for responding to these questions in writing. We hope and expect you can provide answers by April 16th. While there are only 15 signatures on this letter, these questions represent concerns of a much larger group of local residents.**

**Sincerely,**

**James and Anna Callahan  
Lynn Davison  
Ann Gosline  
Chuck Klingenstein  
Robin Kulibert  
Quentin Lewton  
Annie McGreevy  
Rick and Diana Nash  
Valerie Neale  
Alxe Noden  
Ronald Pulliam  
Carolyn Shafer  
Linda Shore**

**cc:**

**County Supervisor Manuel Ruiz, Chair  
County Supervisor Bruce Bracker, Vice Chair  
County Supervisor Rudy Molera**