

August 5, 2021

Mike Fronapfel Director of Planning & Development Centennial Airport Arapahoe County Public Airport Authority 7565 South Peoria Street, Unit D9 Englewood, Colorado 8012

RE: Sky Harbour Hangar Campus KH Project Number: 196197000

Dear Mr. Fronapfel,

cuments Thank you for the comments on August 2, 2021 for the above mentioned project. In an effort to address your comments concisely and simplify your review of these contextual site plans, we have summarized your comments and our responses below.

COMMENT RESPONSE LETTER: SITE PLAN

ARAPAHOE COUNTY WATER & WASTEWATER AUTHORITY

- 1. Please submit ACWWA utility plans directly to ACWWA for review, comment, and approval (independent from City/County approval process). Please refer to the "For Developer" link on ACWWA's website at www.acwwa.com for additional design requirements and submittal procedures. An impress account will need to be established at the time of the initial submittal. Information regarding the impress account can also be found at the aforementioned link.
 - Response: Acknowledged. ACWWA plans will be submitted directly to ACWWA for review and approval._The de cloper will create an impress account prior to initial submittal.
- We welcome further discussion with the applicant and designer regarding the water and sanitary. alignments and accessibility. All existing water and sanitary pipe not utilized will need to be disconnected and disposed. Additionally, further details on the construction phasing and service connection will need to be explored.
 - Pesponse: Acknowledged. Design team will have a separate pre-submittal meeting with ACWWA to discuss phasing and overall utility layout.
- Separate service lines, taps, and meter pits are required for domestic, mechanical equipment, and irrigation services. Please provide plumbing plans, proposed fixtures cut sheets, and meter sizing calculations per AWWA M22. An M22 spreadsheet for meter sizing can be found at the above web address. Please provide all landscape and irrigation demand calculations as well. ACWWA has a maximum 10 fps velocity requirement through the water service lines and meters. Tap fees for the respective mater sizes can be found in Appendix A of ACWWA's Rules & Regulations which can be found at the website listed above. Tap Fees are based on tap equivalents, annual demands, and maximum velocity requirements.



- Response: Acknowledged. Domestic and irrigation calculations will be provided to verify meter sizes.
- 4. All existing and proposed ACWWA utilities, including meter pits are to be within existing ROW or a minimum 30' wide easement dedicated to ACWWA by separate document. Please refer to "ACWWA Easement Checklist" at the web address for easement requirements and instructions for preparing easement exhibits. Parking, landscaping, and permanent structures are not permitted within an ACWWA easement. ACWWA utilities are to be accessible by vehicle with unrestricted access through any security gates or fences.
 - Response: Acknowledged. Easements will be dedicated as required per ACWWA standards.
- 5. Sampling manholes are required for each sanitary sewer service. Sand/oil interceptors will be required for any internal drains and sized per ACWWA criteria.
 - Response: Acknowledged. Sampling manholes will be provided for each sanitary sewer service.
- All ACWWA required documents are to be completed and approved prior to construction release, including tap fee payment, Letter of Credit established, easements recorded, Development Agreement completed, ACWWA utility plan approval, and wastewater discharge survey completed.
 - Response: Acknowledged. All necessary fees and documents will be provided prior to start of construction.
- 7. The utility contractor will need to be on ACWWA's pre-qualified list. The pre-qualified contractor list can be found on their website, along with closeout procedures including as-built requirements and Conveyance and Acceptance of the utilities.
 - Response: Acknowledged. The utility contractor will be on ACWWA's pre-qualified list.
- 8. Please contact Wade Wheatlake to schedule an ACWWA pre-submittal meeting or when ready to submit to ACWWA. The pre-submittal meeting will cover ACWWA design and submittal requirements.
 - Response. Acknowledged. Design team will coordinate with Wade Wheatlake for a presubmittal meeting.

ARAPAHOE COUNTY PUBLIC WORKS & DEVELOPMENT DRAINAGE STUDY

- The County case number for engineering submittal will be assigned when the applicant submits the entire engineering documents to the County for review and approval.
- Response: Acknowledged. Case number will be included on plans and reports once received.
- 2. Please refer to the updated County Phase III Drainage Report checklist and submit a completed copy with the resubmittal. This checklist is included in the Staff review pack.
 - Response: Acknowledged. The drainage report will comply with the Phase III checklist.



- 3. The site lies within the <u>Lone Tree and Windmill Creek</u> drainage basin, and upstream of the regional detention and water quality facilities. Flows cannot be redirected between major drainage basins. Pre-treatment (20/10 rule) must be provided within each basin.
 - Response: Acknowledged. Historic drainage patterns will be maintained, and pre-treatment will be provided on-site for each basin.
- 4. A drainage easement is required for the proposed pre-treatment facilities. The legal description of the easements will need to be submitted along with the formal submittal to the County for review by County GIS/Mapping department. Please note for easement to be dedicated to Arapahoe County requires the easements to be presented to the Board of County Commissioners for acceptance. Once the legal descriptions are approved, the agreement is accepted by all parties, Staff will present to the BoCC. The reception number from the document will need to be added to the construction plans. Allow for sufficient time to get this completed or get done early so there are no delays.
 - Response: Acknowledged. Drainage easements will be provided to Arapahoe County and SEMSWA for review. Once recorded, drainage easement recording numbers will be included on the construction plans.
- 5. Need to verify if the existing storm drain systems have the capacity to carry the additional runoff from the development.
 - Response: Acknowledged. Existing storm drain infrastructure will be evaluated to verify sufficient capacity.
- 6. Please include the excerpts if there are information referenced from other studies and reports.
 - Response: Acknowledged. Excerpts will be provided with the drainage report as applicable.
- 7. Include the drainage maps for the existing and the proposed condition.
 - Response: Acknowled red. Bisting and proposed drainage maps will be provided.
- 8. See additional comments from SEMSWA.
 - Response: ACK owedged. Additional written comments from SEMSWA will be coordinated and addressed.

DEVELOPMENT PLAN

- 9. Please label the two existing access points as "existing access to be removed".
 - Response: Notes will be added to the plans.
- The plan shows 4 access points to Isbill Rd one with gate. Is this an emergency access point? Please clarify on the plan.
 - Response: Correct, there is a gated access between the two western hangars to allow for fire access.
- 11. Please know that the future access points for the development south of Isbill Rd should be align with the proposed access location. No additional access point will be permitted.
 - Response: Acknowledged.



- 12. Provide additional information for the 1.15-ac lot called "SHG-Lot B":
 - The use of the parcel
 - Is this parcel a part of the proposed development? If so, please include the trips in the TIS.
 - Response: The SHG-Lot B parcel is outside the scope of this development.

TRAFFIC IMPACT STUDY

- 13. Table 1 include the trips information assumed in the 2008 Centennial InterPort Traffic Impact Study. Also determine if the existing infrastructures still adequately serve the proposed development.
 - Response: Traffic Impact Study will be revised to account for the 2003 Centennial InterPort Traffic Impact Study assumed trips. Existing infrastructure will be evaluated as part of this study.
- 14. Please evaluate if auxiliary turn lanes are required at the access points. If so, specify the taper and storage lengths.
 - Response: Offsite improvements will be evaluated as part of the Traffic Impact Study.
- 15. The site plan shows 4 access points onto Isbill Rd one with gate. What is this gated access point? For an emergency access?
 - Response: Correct, there is a gated access between the two western hangars to allow for fire access.
- 16. Per the TIS, the intersection of County Line Road and Isbill Road may need to be signalized by 2023. Please specify who will be responsible for the funding of this traffic signal at County Line Rd and Isbill Rd. A Traffic Signal Escrow Agreement (TSEA) is required.
 - Response: This will be coordinated with Arapahoe County.
- 17. An IGA may be required for the improvements at County Line and Peoria Street between Arapahoe County, Douglas County, Airport and SunBorne/Developer.
 - Response: Acknowledged.
- 18. The adjusted traffic volume should be used for traffic evaluation.
 - Response. Acknowledged. The adjusted traffic volume will be used for the traffic evaluation.

CENTENNIAL AIRPORT

- Please include information in your narrative on the largest aircraft the proposed hangars are designed to accommodate.
- Response: Acknowledged. The proposed hangars are designed to accommodate up to and including a Bombardier Global 7500.
- 2. Please show the heights of the buildings and heights of the hangar doors on the building elevation sheets.
- Response: Heights of buildings and heights of hangar doors have been provided.



- 3. It appears there are no FAA prescribed object free areas (OFA) included on the ramp between the hangar rows. Sky Harbour personnel and tenants will be responsible for always ensuring wingtip clearance and the safe movement of aircraft on the property. The Airport recommends the use of wing walkers, escorts, or other reasonable methods to ensure an equivalent level of safety to an FAA prescribed OFA for aircraft operating on the Sky Harbour property. Please provide details on how Sky Harbour will ensure taxiing and parked aircraft wingtip separation and clearance will be achieved.
- Response: All ramps within the development will be managed ramps which entail dedicated Line Service staff to ensure the safe and efficient movement of aircraft between the hangar rows. Direct and real time communications between Sky Harbour staff and tenants will ensure each movement is safely coordinated while using wing walkers, escorts and ramp markings to maintain spatial awareness between facilities and other aircraft.
- In order to protect the Airport, we will have our legal counsel draft a waiver of liability letter to be signed by the aircraft owners and/or operators that will be operating on the Sky Harbour property.
- Response: Sky Harbour's dedicated personnel actively operate and manage the ramp through our Line Service who oversee each alteract movement. Both arriving and departing base tenant aircraft at Sky Harbour's received uled/coordinated directly through our Line Service personnel to ensure the highest lead of safety and security.
- 5. All access gates providing access from the street to the parking areas and from the parking areas to the airside ramp must be clearly labeled on the site plan. Please include the plan for controlling access through each gate.
- Response: Gate locations have been identified on the plans.
- 6. Based on our calculations of 1 parking space per 1,000sqft of hangar space and 3 per 1,000 sqft for the GSE building we estimate that the minimum of 236 parking spaces need to be provided. The Site Plan Legend shows 250 total spaces, however if you add the Phase 1 and Phase 2 parking numbers it comes to 238 total spaces. Our calculations show a total of 247 spaces provided assuming three internal parking spaces per small hangar and 4 per large hangar. Please clearly label the number of parking spaces on the Site plan both external and internal.
- Assponse: The parking count note has been updated to reflect the accurate parking totals.
- It appears that there is not sufficient parking internally or directly adjacent to Hangar Building D. Each of the small hangars should have 8 parking spaces each and parking spaces need to be either internal, next to or directly adjacent to the hangar to be counted as parking for that hangar.
- Response: The project acknowledges the parking requirements and does meet the overall site parking requirements for Phase 1 and Phase 2. However, we believe 8 spaces directly adjacent per small hangar, as is noted for building D, is excessive for the typical use. These hangars are designed to be leased to a single tenant who has sole access to their hangar. In



this case, the 3 spaces provided, per our notes, are more than enough for this limited utilization. On top of this, an additional two or three vehicles could be accommodated inside each hangar itself, which provides additional parking options for tenants. The amount of surface parking adjacent to building D was reduced so that stormwater management and pervious area could take precedent.

- 8. Please provide a separate signage plan for staff review. This will need to include any monument signs or signs that are affixed to the building. (The painted numbers on the hangar doors are viewed as an architectural element and will not need separate sign approval).
 - Response: Preliminary signage has been provided on the elevations that help convey the spirit of any final building signage in location, size, and color. The full design is typically a deferred design to a signage consultant and is currently in safty discussions. We are happy to provide a comprehensive signage package for app oval when it has been fully designed.
- 9. Please provide an explanation of how you plan to perform snow removal on the site including the direction the snow will be plowed and where you plan to move or stockpile it.
- Response: Snow will be moved from the south side of the site to the north towards the proposed water quality facilities where it will be stockpiled and eventually melt.[TJ Are there designated spaces where snow is pushed and stored? Can we store it here as proposed? Perhaps we simply say that we will de lise a snow removal plan with SunBorne.]
- 10. FAA Spec reflectors will be required along the edges of the ramp and Sierra taxilane. Please show the reflector locations on the site plan.
- Response: FAA Spec reflectors will be provided with the final ramp and taxilane design.
- 11. Please verify and label the taxilane Sierra to ramp connector names. (S3 and S4?)
- Response: Sierra ramp connectors have been labeled on the plans.
- 12. We recognize the design and layout of the main Sierra taxilane was approved as part of the Wings Over the Rockies development. However, since Sky Harbour will be constructing this taxilane as part of your project please include a plan sheet with the design, layout, cross section, reflector, and signage plans.
- Response: This comment has been removed.
- 13 Please show on the plans that Sky Harbour intends to use the FAA approved seed mix for Centennial Airport. (See attached specification)
 - Response: A note has been added to indicate that the development will use the FAA approved seed mix for Centennial Airport.
- 14. All comments from the referral agencies will need to be addressed to their satisfaction.
- Response: Acknowledged.
- 15. Construction of Phase One must be completed within 2 years of Board approval and construction on Phase Two must be started within 3 years of Board approval.



- Response: Acknowledged.
- **16.** A 3% construction fee will be paid to the Airport Authority no later than 30 days after a Certificate of Occupancy has been issued for each of the four hangar rows.
- Response: Acknowledged.

SOUTHEAST METRO STORMWATER AUTHORITY GENERAL COMMENTS

- This project is located within the Lone Tree & Windmill Creeks drainage basin. System
 Development Fees (SDFs) and Excess Capacity Fees (ECFs) have been established for
 development in this drainage basin. Please note SDFs/ECFs will be assessed at the time of
 approval and are based on added impervious area. These fees shall be paid prior to any permits
 being issued by SEMSWA.
 - Response: Acknowledged. Fees will be paid prior to permit issuance.
- 2. Please note that permits are required prior to construction commencing on this site. Permits necessary for construction may include the Grading, Erosion and Sediment Control (GESC) Permit and Stormwater Public Improvement Permit (SPIP). There are permit fees and collateral required for these permits which are assessed at the time of approval. All fees and collateral shall be paid prior to any permits being issued by SEMSWA.
 - Response: Acknowledged. Permit will be applied for and received prior to construction.
- Please refer to the Resubmittal Checklist for all required documents and any remaining review fees.
 - Response: Acknowledged.
- 4. Please submit a response letter to the comments with the re-submittal. Response letter is required for further review.
 - Response: Comment response letter has been provided.

AIRPORT DEVELOPMENT PLAN COMMENTS

- 5. Please revise the Development Plan to reflect all necessary comments as addressed on the other review documents associated with this project.
 - Response: Acknowledged. Development Plans have been revised to address comments as applicable. Comments from outside referral agencies will also be addressed in subsequent submittals.

PHASE III DRAINAGE REPORT COMMENTS

6. Adequate information was not provided to confirm if this site meets Arapahoe County criteria. Please revise the drainage report following the Arapahoe County Phase III Drainage Report



checklist and provide all required items.

- Response: The site will be designed to meet Arapahoe County and SEMSWA criteria.
- If major drainage basin portions of site exceed future imperviousness from MDP, additional
 analysis and/or on-site detention and water quality may be required. Please coordinate with
 SEMSWA.
 - Response: The proposed development will comply with the MDP and additional onsite detention will not be required.
- 8. The SEMSWA 20/10 calculator has been updated to use a rain garden and/or sand filter basin to meet 20/10 requirements, however a variance is required from Arapahoe County to utilize one of these. Please coordinate with the County & SEMSWA.
 - Response: Acknowledged. The updated 20/10 calculator will be utilized. If a rain garden or sand filter is to be utilized, design team will coordinate with Arapahoe County.
- 9. Please refer to redlines and make the necessary corrections and revisions.
 - Response: Acknowledged. Redlines will be condinated and addressed.

GGESC PLANS COMMENTS

- 10. The Standard GESC Permit comprises GESC Plans and a GESC Report. Please provide a GESC Report with future submittal. Refer to the SEMSWA GESC Plan and Report Checklist located in Appendix E of the SEMSWA GESC Manual for additional information.
 - Response: A GESC report will be provided with the formal submittal to Arapahoe County and SEMSWA.
- 11. Provide the SEMSWA Case No. DPR21-00047 on the Cover of the GESC Report and all GESC Plan sheets.
 - Response: Pass number will be added to the cover sheet and plans.
- 12. Please provide the project/development name on the Engineers and Owners certifications provided on the cover sheet of the GESC Plans.
 - Response: Additional information has been provided.
- 16. Please refer to the Initial GESC Plan, and address the following:
 - a. Provide and label existing and proposed easements. Revise all GESC plan sheets accordingly.
 - b. Provide and label the temporary stockpile area (SP).
 - c. Provide and label quantities for each BMP. Do not provide duplicate labels of each quantity. Ensure quantities and units correlate with the Engineers Cost Estimate (ECE).
 - d. Consider utilizing only one Vehicle Tracking Control (VTC) to limit tracking off site.
 - e. Provide the following information in this format in the report and on the plans for each



Sediment Basin (SB) that will assist the Field Inspector:

SB-Name

Width =

Length = $2 \times Width$

Bottom of Sediment Basin (SB) elevation=58xx.xx

Overflow Weir elevation = 58xx.xx

Overflow Weir width =

Top of Riser Pipe = (should = the weir elevation)

Bot of Riser Pipe = (should = 1.25 ft. above the bottom of SB elevation)

Hole Spacing =

Hole Diameter =

f. Provide and label the following Diversion Ditch (DD) information on all proposed (DD)s: Length =

Slope =

Width = (the minimum width is 5ft.)

Depth = (the minimum depth is 10")

Lining Type =

- Response: Detailed sediment basin design with be provided with the formal submittal to Arapahoe County and SEMSWA.
- 14. Revise the Interim GESC Plan per the comments on the Initial plan, and address the following:
 - a. Screen back water and sanitary sewer improvements.
 - b. Remove parking stripes not needed or required on GESC plans for clarity.
 - c. Provide and label cut/fill areas. Provide a summary/table of cut/fill quantities.
 - d. Provide flow arrows based on proposed grading.
 - e. Provide and label finish floor elevations.
 - f. Provide and label areas of Seed & Mulch (SM) and associated quantities.
 - g. Provide and label Erosion Control Blanket (ECB) on all slopes exceeding 4:1 and associated quantities.
 - Response. Detailed Interim GESC Plan will be provided with the formal submittal to Arapahoe County and SEMSWA.
- 15. Revise the Final GESC Plan per the comments on the Initial and Interim plans, and address the following:
 - Provide and label Street Sweeping (SS).
 - b. Label all areas of permanent landscaping (LS).
 - c. Areas labeled (ECB) in the Interim plan should not be removed and should be labeled to remain in the Final plan.
 - d. Sediment Basin(s) should be labeled to remain or transition into the permanent stormwater facilities.
 - Stabilized Staging Area (SSA) should not be relocated and should remain until completion of the project to minimize disturbances.



- Response: Detailed Final GESC Plan will be provided with the formal submittal to Arapal County and SEMSWA.
- 16. Please refer to redlines and make the necessary corrections and revisions.
 - Response: Acknowledged. Redlines will be coordinated and addressed with the ornal submittal to Arapahoe County and SEMSWA.

SOUTH METRO FIRE RESCUE GENERAL COMMENTS

- 1. Water supply system layout need to be developed and approved.
 - Response: Acknowledged.
- 2. Knox keyswitch for gates shall be provided
 - Response: Gates will have knox keyswitches.
- 3. Provide an Autoturn analysis
 - Response: Autoturn analysis will be provided with formal submittal.

We appreciate your review and approval of these plans. Please contact me at 303-974-3625 or brad.cooney@kimley-horn.com should you have any questions. Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Brad Cooney, PE Project Manager