Sheldon & Associates, Inc.
5031 University Way NE
Seattle, Washington 98105

February 15, 2001

U.S. Army Corps of Engineers
Regulatory Branch
PO Box 3755
Seattle, WA 98124
Attn: Ms. Gail Terzi, Project Manager

Washington State Department of Ecology
Shorelands & Environmental Assistance Program
3190 - 160th Ave. S.E.
Bellevue, WA 98008-5452
Attn: Ann Kenny, Environmental Specialist

Exhibit 252
Date 2/05/02
Witness SHELDON
Diane Mills Court Reporter

Re: Port of Seattle, Ref. No. 1996-4-02325

Dear Ms. Terzi and Ms. Kenny;

Sheldon & Associates, Inc. has been retained on the behalf of the Airport Communities Coalition to conduct reviews of environmental documents submitted by the Port of Seattle for the proposed Third Runway project at the Seattle-Tacoma International Airport (STIA) focused on the proposals to minimize hydrologic impacts to the wetlands left on the site, and to the proposed compensation plan within the upper Miller Creek drainage. Given the extent of questions remaining on the analysis of the proposed impacts of the project, I have precluded reviewing or commenting on the proposed off-site compensation project in Auburn as it appears premature to completion of the impact assessment.

I have coordinated my review with Mr. Bill Rozeboom of Northwest Hydraulics to obtain his input on the technical stormwater engineering elements of the proposed plans and technical documents. Documents reviewed included:

Wetland Delineation Report (WDR). Master Plan Update Improvements Seattle Tacoma International Airport. Parametrix, Inc. December, 2000
Natural Resource Mitigation Plan (NRMP). Master Plan Update Improvements Seattle Tacoma International Airport. Parametrix, Inc. December, 2000
Appendices A-E Design Drawings (DD). Natural Resource Mitigation Plan. Parametrix, Inc. December, 2000
Revised Public Notice.(COE PN) #1996-4-02325. Port of Seattle. U.S. Army Corps of Engineers, Seattle District. Dec. 27, 2000
Comprehensive Stormwater Management Plan (SMP), volume 4, Technical Appendices. Master Plan Update Improvements. Seattle Tacoma International Airport. Parametrix, December, 2000

My comments on the submitted plans and documents are based on my hands-on experience gained from 17 years of working as a professional in the wetlands and aquatic resource field. I was the first Wetland Planner for King County, reviewing every development application related to wetlands, streams or aquatic environments. I've reviewed permit applications, conditioned permits, assessed wetland functions, determined wetland impacts, designed compensation/restoration plans for wetlands and streams, and provided construction installation oversight. Most importantly, I have had the opportunity to learn the harsh realities of translating "plans" into the installation of real projects in the ground. I have experienced the unforeseen consequences of construction activities from even the most carefully designed projects. I am acutely aware of the limits and constraints of construction, and the sharp distinction between what was proposed, and what is feasible for a contractor to construct. My professional experience is presented in my attached vitae.

To summarize my findings, the submitted technical documents from the Port for the proposed Third Runway do not provide adequate, substantiated documentation that the impacts to aquatic resources from the proposed projects meet the requirements and provisions of Section 401 of the Clean Water Act or Section 404 of the Clean Water Act as administered by the Washington State Department of Ecology and the Seattle District Corps of Engineers, respectively.

My comments on the plan review are listed first as an overview of key issues, followed by a discussion of each of the key issues and the specific design elements missing from the technical analysis that demand further disclosure or analysis before decisions regarding permitting should be concluded. Key issues are not listed by priority.

Key Issues

1. Conclusions regarding the movement of shallow groundwater through the engineered walls and the project's ability to re-introduce surface waters back into the downslope wetlands are unsubstantiated. This is the keystone for being able to conclude no adverse impacts to the remaining resources downslope of the runway project.
2. The text of the NRMP does not clearly disclose significant technical details that casts doubt as to the long-term success and effectiveness of the compensation proposals.
3. The calculation of temporary wetland impacts under-estimates the extent and permanency of secondary impacts and the issue of construction timing.
4. Conclusions that there will be no adverse impacts to functions in wetlands left to remain within the project area cannot be denied or confirmed in future conditions because no baseline data (pre-project) has been collected.
5. There is no provision for objective construction oversight independent of the applicant's influence.

Issue Discussion

1. **Conclusions regarding the movement of shallow groundwater through the engineered walls and the project's ability to re-introduce surface waters back into the downslope wetlands are unsubstantiated.**

The ability to collect infiltrated surface water and recover existing groundwater beneath the deep accumulation of fills for the embankment is the primary design element that allows the applicant to conclude that placement of massive quantities of fill and engineered retaining walls will have no long-term impacts on the hydroperiod (and therefore the ecological functions) of the downslope wetland complexes and Miller Creek. Breaking it into three simplistic steps, the project has to be able to:

- pick up the existing shallow groundwater under the fill and the 'new' surface water from the proposed fill,
- transport groundwater under the retaining wall while maintaining the structural integrity of the wall
- re-introduce the water back into the existing downslope wetlands and Miller Creek in a manner that replicates the methods, quantities and timing of pre-project conditions.

An analysis of how they have or have not identified the design and engineering requirements for each of those steps follows:

Groundwater Movement Under the Wall

The majority of the existing wetlands west of the airport are hydrologically maintained by shallow groundwater and seeps that emanate from a shallow groundwater lens which daylights along the west-facing hillside (NRMP pg. 2-14, WDR pgs. 3-18 to 3-41). The project proposes to place a rock underdrain beneath the fill (Fig.5.2-16 NRMP) to capture 'groundwater' and transport it to the downslope side of the engineered wall.

If the underdrain does not function as it is suggested that it will, the consequences to the downslope wetlands and streams could be substantial. Reduction in the volume of water available, or a fore-shortening of the hydroperiod, to the wetlands caused by changes in the shallow interflow zone could result in: reduced wetland size, reduced export of particulate and/or dissolved organics from the wetlands into streams, reduced habitat functions, and implications as to the likely success of the proposed compensation plans.

Critical design details that are not addressed in the documents I reviewed include:

- How will the rock underdrain be designed to assure that it will not eventually become filled with particulates, rendering it no longer pervious? From an engineering perspective, groundwater has to be able to pass through the wall, regardless of the downslope wetland issues: what secondary design elements are proposed to assure that water can get out from behind the engineered wall structure?
- Based on a review of the relative infiltration rates modeled through the fill soils compared with infiltration rates tested through existing fills there appears to be some discrepancy between the results (Northwest Hydraulics, Feb.15, 2001). Assuring that waters from the surface of the fill plane can and do infiltrate effectively to the underdrain system is a keystone element in the applicant's conclusion that the hydroperiod of the downslope wetlands will not be adversely effected. The analysis appears to raise some doubts that the rates of infiltration will be as described.
- How will the 140+ foot retaining wall be engineered to allow a constantly saturated underdrain to be present?
- If the underdrain is placed on the existing ground surface (Fig. 5.2-16), how will it function to collect and transport the shallow groundwater lens that is currently 10 feet (estimated) below the existing ground surface, the primary hydrologic source to the existing wetlands and Miller Creek?
- It is not clear in the submitted plans if the proposed underdrain will be placed only in the locations of existing wetlands (proposed to be eliminated) under the fill, or will an underdrain be placed as a uniform blanket across the entire fill zone. If it is only proposed to pick up the waters from the filled wetland areas, then how will the 'groundwater' infiltrating from the other areas of tne fill be collected into the discharge system downslope of the wall? How and where will groundwater in the existing upland soils (proposed to be filled) be collected and transported under the wall?

Re-introduction of Water Back Into the Downslope Areas

In order to be able to conclude that there will be no adverse impacts to wetlands and stream flows downslope of the proposed fill, the waters from the upslope side of the wall/fill have to be re-introduced into the downslope resources in a manner that replicates previous conditions and/or minimizes adverse effects. The NRMP text does not discuss how waters will be collected and re-introduced into downslope wetlands except in the most general terms that it will just simply be done. The plan sheets (DD) provide some representations about what is proposed to occur, however, they are at best, schematic and representational only.

The implications for the waters not being re-introduced into the downstream resources appropriately include:

- Transforming seep wetlands driven by interflow into wetlands driven by surface flows. This changes the nutrient transport systems within the wetlands, it may serve to reduce the size of wetlands (at the upper margins where seeps are no longer present to 'feed' the wetland water across a broad band).
- A complete change in the hydroperiod of the wetlands from shallow groundwater moving slowing through upland soils throughout the year, to storm event driven systems where the water source is 'metered' from a storm pond outfall into an infiltration trench (see the note below regarding the functional capabilities of infiltration trenches). Such changes most often result in a lengthening of the annual drought the wetlands experience, a potential shift in plant species composition and community composition with a subsequent potential change in habitats, and a potential impact on the extent of wetland conditions (i.e., a decrease in saturated zones and a resulting reduction the size of wetlands).

Critical design details that are not addressed in the documents I reviewed include:

- What is the sequential and functional relationships between the TESC swales, the inner collection swale (east of the Security Road), and the replacement drainage channels? It appears that the inner collection swale is designed to function as a road-side ditch for the Security Road and perhaps as an interceptor ditch for waters draining off the face of the wall. It is unclear from the DD where this water is directed into the stormwater system, west of the wall, and whether the storm water from the surface of the paved road, is engineered to be mixed with the clean groundwater discharging from the rock underdrain. What would be the resultant water quality implication of mixing stormwater and clean groundwater on the downslope resources?
- If the water from the rock underdrain is designed to always discharge into the replacement drainage channels (Fig. 5.2-16, NRMP), then how is it proposed to use that shallow groundwater to recharge wetlands that are not linked to the replacement drainage channels?
  On DD Sheet STIA-XXXX-C6, for example, it is nearly impossible to determine what is proposed. On the north end of the sheet, Segment C replacement drainage channel is identified (apparently flowing north). Immediately to the south (and continuous with Seg. C) is identified Segment D replacement drainage channel, also apparently draining north. Both of these drainage channels appear to be the continuation of a north flowing swale that parallels the west side of the Security Road, starting from south of the south end of the plan sheet. That large swale is drawn <u>through</u> the zone identified as Pond D. It is impossible to determine from these plan sheets what is actually being proposed or what will actually occur if it is constructed. How deep are the swales relative to the downstream slope wetlands and will the swales intercept and divert the shallow interflow necessary for those downslope wetlands? What is the long-term function of the large continuous swale compared to the replacement channel segments of C and D (which are discussed in the NRMP text as critical to maintaining long-term wetland hydroperiods). How can a stormwater pond be designed with a swale running through it? If these issues have simple explanations, then it must be said that the engineering

graphics submitted for public and regulatory agency comment, review and conditioning are not effective at conveying the design intentions or consequences.

- No discussion is provided in the NRMP of the functional affect of transforming downslope wetlands from seep driven wetland systems (groundwater discharge zones) to wetlands that are driven by surface water input. No analysis is provided of the soil conditions in the areas of proposed 'infiltration swales' to determine if these areas are appropriate for attempting to infiltrate water from the stormwater ponds into shallow groundwater. In fact, in some areas, the infiltration trenches are designed to be placed in the wetlands. Have they calculated those impacts as temporary or permanent wetland impacts?

Based on my professional experiences of designing, conditioning, and observing 'infiltration' systems over the last 10 years, I have yet to see one function well in glacial till soils. Usually the rate of water entering the infiltration gallery is faster than the ability of the soils in the infiltration zone (which are usually saturated when 'new' flows enter the system) to transmit water. Therefore, infiltration zones actually function as surface water discharge zones where the saturated conditions within the infiltration trench cause water to be discharged as shallow surface sheet flows. This may not have adverse effects in areas with very flat topography where shallow surface water can move slowly across/through the existing vegetated zone and passively find its way into the downstream stream or wetland. However, in this setting, the discharge areas are invariably located on the side of the west facing slope and surface discharges will likely coalesce into concentrated surface flows, with the potential to cause rills and erosion down into the receiving waters (streams and wetlands). If flows become concentrated as surface flows, the wetlands will experience a change in their hydroperiod and saturation will be concentrated at the point(s) of input, while other zones on the upper margins of the wetlands may experience a decrease in hydrology because the shallow groundwater seeps have been intercepted.

2. **The text of the NRMP does not clearly disclose some significant technical details that will clearly reduce the long-term effectiveness and success of the compensation proposals.**

The most significant element is that the NRMP text fails to identify that the rerouted Miller Creek will be "lined" with geotextile fabric for its entire length through the former Vacca Farm site. Sheet STIA-9805-C5 of the DD plan sheets clearly indicates geotextile lining the stream bed in Detail 1.C-2. It is shown again on sheet STIA-9805-C7. The NRMP text does not mention it.

The significance is simple: placing a 'stream' within a geotextile blanket biologically and chemically isolates the 'stream' and all its ecological processes from the soils of the substrate. One has a visual stream that rests on fabric, isolated hydrologically from the underlying soils. The reason they have designed the re-routed stream to be placed within a geotextile liner is also quite simple: the Vacca farm site is peat, and peat does not allow the creation of a stream channel with gravel substrates. The water will simply disappear into the organic soils, until they are fully saturated, then there will be an open water pond with water flowing through it.

This is also the reason why the Miller Creek floodplain is not engineered to function as a natural floodplain. Sheet STIA-9805-C2 (DD) shows the right bank (looking downstream) of the new channel at 2-4 feet higher than the floodplain. A natural floodplain would simply slope gently upwards from the edge of the ordinary high water mark of the entire stream channel, so that floodwaters could easily flow into and out of the floodplain along its entire interface with the stream. This engineered floodplain is designed to be graded so that it drains all to one point at the south end. The rationale provided in the NRMP is that the floodplain will not pond water, therefore eliminating potential waterfowl habitat. However, a natural occurring stream channel, sloping up and away from the OHWM of the stream would not pond water, as floodflows would simply sheet flow back into the channel as the flood waters receded. One cannot engineer a naturally functioning floodplain if one has to line the stream channel with geotextile fabric, one has to design the floodplain to drain **parallel** to the stream channel, resulting in floodwaters re-entering the stream at the bottom of the 'floodplain'. The floodplain and the stream are designed to be hydrologically isolated from one another, except in extreme events when the stream can over-top the ridge line separating them.

An attempt to create a fabric-lined stream channel and floodplain wetland in peat substrate was permitted in the mid 1980's by the Seattle District COE on North Creek, in King County. The site has never worked successfully since its installation. The site is located on North Creek, in the northeast quadrant of the intersection of I-405 and SR 522, at the Koll Quadrant Business Park. The web site for a 1994 aerial photograph of the site is located at:
http://terraserver.microsoft.com/image.asp?S=10&T=1&X=2806&Y=26456&Z=10&W=2 , and a copy of the aerial is attached to the hard copy this letter.

The design for North Creek was quite similar to what is proposed for Miller Creek: create a meandering log and gravel filled stream channel, with an associated forested/shrub floodplain forest, in peat substrates. The weight of the gravel, rocks, woody debris, plus the water in a fabric liner caused the peats in the floodplain wetland to rebound to approximately 18 inches higher in elevation than it was designed. The stream and the reed canary grass dominated wetland remain hydrologically isolated from each other.

Even if it is argued that North Creek is still providing the ecological benefits of a real stream in that setting, there is no argument that there is no hydrologic connectivity between the stream and the wetland. There is little basis to conclude that the stream and wetland function as an integrated ecological system. The Koll Business Park provides an excellent illustration of why the same failed technique should not be permitted on Miller Creek . It illuminates that the Port's prediction of creation of floodplain wetland on Miller Creek is unsubstantiated. It also, unfortunately, illustrates the consequences of the extremely limited staff resources of the permitting agencies: this failure has not yet been required to be rectified even though Corps staff at the time was quite aware of the failure of the executed plan. This issue is discussed further in Issue #5, below.

- Lining the creek with fabric means that logs and woody debris that they propose to anchor will require slitting of the fabric and 'patching' around the anchor cables. No discussion of the resulting risk of the stream "springing a leak" is provided, nor any discussion of contingency actions if such a leak occurs. To patch a system which remains vulnerable to ultimate unrecoverable failure due to an initial fatal design flaw.
- Based on the proposed elevations of the floodplain for Miller Creek on Vacca Farms, Miller Creek will not flood the floodplain except in the extreme 100 year event (B. Rozeboom, pers. com.). If the floodplain on Miller Creek doesn't flood the floodplain, the "wetland" will be hydrologically isolated because the fabric liner in the stream will isolate

the water from entering the peat soils in the floodplain and wetland conditions may not form.

- No stream flow augmentation from the groundwater in the peat soils is possible for the entire length of stream that is lined. It is implied that the peat soils of Vacca Farm will provide low-flow augmentation to Miller Creek: unless those waters can flow out the south end 'exit' of the floodplain, they cannot get into the lined stream channel.

3. **The calculation of temporary wetland impacts under-estimates the extent and permanency of secondary impacts and the issue of construction timing.**

Table 3.1-3 (NRMP, pg. 3-6) identifies a total of 2.05 acres of temporary impacts to wetlands within the project action area. Impacts are identified in the NRMP as "temporary" as a method to reduce the calculation of total acreage of permanent wetland loss. Examples are provided below of the various situations in which the applicant has identified impacts as 'temporary', and an explanation of the potential for permanent or long-term (multiple decade) impacts is provided.

- Placing sediment control ponds in wetlands during the construction phase of the embankment fill (examples: WL 18, WL 37A)
  They provide schematic drawings (DD, sheet STIA-XXXX-C9) that provide a simplistic rendering of before/after pond conditions. Anyone who has ever designed or dealt with stormwater ponds understands that the engineering of those ponds is determined by the elevations of the pipes, conveyance swales, and transport mechanisms required to get the stormwater **into** the ponds. The DD renderings show idealized situations where the bottom elevations of the temporary ponds correspond nicely to the restored wetland bottom elevations. There is no indication of an engineering analysis of the required stormwater management plan to substantiate pond dimensions (depths as well as overall size). Such an analysis is required prior to being able to substantiate whether a wetland impact will be temporary or permanent. There is no assessment of impacts to the downslope resources if those temporary ponds had to be excavated to depths deeper than the downslope wetland sub-surface.
- There are areas where temporary ponds and ditches are proposed to be restored to wetland conditions. The NRMP provides no discussion of how they propose to backfill ponds and ditches and re-establish the groundwater movement through these restored areas. The renderings (DD, STIA-XXXX-C9) simply show ground elevations matching for before and after conditions, even though the DD indicate proposed stormwater ponds excavated to a depth of 10 feet. In order for the restoration of the wetland area to succeed, they need to show how they propose to recreate a pervious upper soil layer over an underlying impervious zone that matches the upslope and downslope conditions of the existing wetland. The design, based on an analysis of the soils in real conditions, has to illustrate how shallow interflow from groundwater will be effectively re-established.
- How will the permanent stormwater facilities effect downslope wetlands? For example, Pond D (Stormwater Management Plan, App. D, Ex. C134.1) is shown to be excavated 20 feet deep in the location of existing WL 41A, and just upslope of WL 39. It is not apparent that they've collected any groundwater or shallow piezomter data in WL 39 to determine if a 20 foot deep pond located upslope from it will have any impacts on the wetland's hydroperiod.

- Areas where they are proposing to place ditches crossing wetlands, for the purpose to conveying sediment laden water to the sediment control ponds, (example: WL A12), would appear to have the potential for permanent impacts.
  There is no discussion in the NRMP regarding how placement of a ditch within the upper reaches of a wetland, perpendicular to the groundwater movement into and through the existing wetland, might pick-up and dewater the lower wetland and effect the continuation of the 'natural' groundwater movement. There is no discussion in the NRMP for how long these temporary ponds and ditches are proposed to be in place. If one assumes that they will be required for the duration of the construction of the embankment fill, then NRMP should also disclose any impacts expected within that time frame (i.e., this is not a 'normal' construction season of one year or one summer growing season).

- The depth to which the permanent ponds have to be excavated to provide the storage needs for stormwater will effect the shallow interflow assumed to be feeding the downslope wetlands. Will the deep temporary ponds intercept/interrupt groundwater movement from upslope into the lower portions of the 'untouched' wetland? There is no soil log data from which they could determine whether adverse impacts will occur downstream of the area of the pond.
- The temporary TESC ditch between Ponds A and Pond E poses a potential adverse effect on the downslope wetland. No data is provided to show how deep the proposed ditch is in relationship to the shallow groundwater that maintains WL 18. There is no data (piezometer wells) on the portions of WL above or below the ditch to substantiate their conclusions.
- The NRMP does not identify if the area of the wetland that is proposed to be converted to a permanent drainage channel is counted as part of the permanent wetland loss or if it is considered in the NRMP to still be wetland.

It is unclear in the NRMP text how the acreage of impact was calculated, and whether or not it included assumable secondary impacts as well as direct physical intrusions. For example, WL 18 is 3.56 acres (WDR, pg. 3-12). The proposal is to permanently eliminate 2.84 acres (NRMP, pg. 3-2) and temporarily impact an additional 0.22 acres (NRMP, pg. 3-6) leaving 0.5 acres of 'intact' wetland. However, when one looks at plan sheet STIA-XXXX-C5 (DD) one can see that Temporary Ponds A and E are both proposed in WL 18, as well as Segment B of the Replacement Drainage channel. It is quite difficult to determine where a half-acre of intact wetland 18 might be left. Does the impact analysis analyze the impacts of the construction of the 'temporary' ponds and swales on this wetland?

Another example of how impacts are not totally accounted for is wetland R-1. It is 0.17 acres in size; they say they will permanently impact 0.13 acres, leaving 0.04 acres intact. That remaining portion of wetland is not going to be functional as such a small fraction of the original wetland. It should all be calculated as permanent loss.

4. **Conclusions of no adverse impacts to functions in wetlands to remain within the project area cannot be denied or confirmed in future conditions because no baseline data (pre-project) has been collected.**

One of the most disturbing elements missing from the NRMP is the baseline data on the hydroperiods of the wetlands proposed to be left after the project. In the absence of such data, no one (applicant or reviewing agency) will be able to make a determination of adverse effect post construction of the embankment fill when there is no pre-existing data? If one wants to be able to determine whether or not the downslope resources have been affected by the project or whether or not their proposed compensation has been effective, then the key parameter that success/failure should be measured by is the maintenance of the groundwater elevations within the wetlands over time. If no pre-project data exists, how can any one determine success or failure?

Given the length of time the applicant has been in the permitting process, there could be a very substantial quantity of pre-project wetland data compiled by which to compare pre and post project hydroperiod conditions and rainfall data. Without out pre-project data (and that means pre-filling in the upland contributing areas of the project wetlands) there is no basis for the reviewing agencies to determine success of the proposed compensation. Such pre-project hydroperiod data should have been collected by the applicant over this time period.

An example to illustrate the necessity of pre-project data: my firm assisted in the design of a groundwater infiltration facility for the City of North Bend to re-introduce surface water above a forested hill-seep wetland. We collected ground-water data in the forested wetland for two growing seasons before construction above the wetland occurred. Post-construction, we've now collected groundwater data for the last four years. Groundwater data is correlated to precipitation data. After the first summer, post-construction, we found groundwater levels in the forested wetland dropped precipitously. Analysis of the stormwater system identified that the contractor had built the wetland by-pass infiltration system "backwards" so that no water was diverted into the infiltration system. The comparison of before/after data allowed the construction mistake to be identified and remedied. In subsequent years, the groundwater data in the forested wetland remains substantially below pre-project conditions. This has prompted additional review and analysis of the design and construction of the infiltration system and additional contingency actions are currently being taken. Without pre-construction groundwater data for that wetland, there would have been absolutely no manner in which to hold the applicant fiscally responsible to respond to the various problems which have arisen. Without pre-existing data there is no possibility, except disagreement between 'experts' as to what pre-project conditions were. At least two water years of pre-existing data is required to preclude the chances that one year's data does not reflect an anomalous year.

5. **There is no provision for objective construction oversight independent of the applicant's influence.**

Research conducted by King County (Mockler, 1998) and Washington State Department of Ecology (2000) has documented that the incidence of 'mitigation' failure is often linked to poor design, poor installation, and no follow-through by the permitting agencies to assure that designed plans are installed properly.

A simple point to be made in light of the myriad technical weaknesses of the submitted plans, is that none of the regulatory agencies for this project have the staff time or budget to commit one or more staff to the long-term construction oversight role this project will demand if it is permitted. Without such objective construction oversight, and without an objective technical review of the proposed compensation plans (both on-site and off-site), I would have to conclude, based on my professional experience that the proposed project will have **far greater** permanent adverse impacts on the downstream resources than these plans and permit applications identify.

Design flaws, confusing plan submittals, and overlooked technical details pose a very real risk to the aquatic resources identified within the project area. Approval of the permit applications, under the provisions of CWA Section 401 and CWA 404, require that the permitting agencies have at least reasonable assurance that the long-term effects of the permitted action will not degrade waters of the U.S. including wetlands. The submitted documents do not provide sufficient data nor accurate analysis of proposed and existing conditions for reviewing staff to draw those conclusions.

Sincerely,

Dyanne Sheldon, Principal
Sheldon & Associates, Inc.

Enclosure: vitae