



May 28, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

Dear Mr. Secretary,

Your intervention is requested to prevent the State of Hawaii Department of Transportation (HDOT) from violating Section 4(f) of the Department of Transportation Act, 49 U.S.C. §303 and 23 U.S.C. §138 in regards to Federal Aid Project No. BR-093-1(20) - Makaha Bridges Replacement Project.

HDOT is proceeding with Federal Aid Project No. BR-093-1(20) without full consideration of the environmental impacts the Project will have on the internationally famous Makaha Beach Park that the Project encroaches. Specifically, HDOT has committed or is about to commit the following violations:

1. Materially significant information (flood drainage data) was acquired after completion of the Project's Draft Environmental Assessment (DEA); however, HDOT did not alter the findings of the FEA nor perform an EIS, which should have been triggered by the Project's \$6 Million of Project redesign changes (see Exhibit A, Environmental Violation Report to the EPA, submitted on July 1, 2013).

2. Materially significant information (flood drainage data) was used to materially change the design of the Project's bridges BUT this data WAS NOT used to change the design of the temporary by-pass road bridges being used during the Project's construction phases (see Exhibit B, Potential Catastrophic Design Error, Temporary By-Pass Route).

3. Although the Project as currently planned WILL have significant impact on the Makaha Beach Park, HDOT is not taking feasible and prudent alternatives available to avoid the Park altogether via an alternative considered but rejected by HDOT during the planning phase of the Project (see Exhibit C, Alternative #4, the mauka route).

In addition to Section 4(f) violations, HDOT is needlessly wasting Federal funds on this Project, since a more superior Project exists under the Oahu Regional Transportation Plan 2035 (see Exhibit D, Project 50, ORTP 2035).

Your assistance in this matter will prevent environmental catastrophe to Makaha Beach Park while ensuring the best use of Federal funds for the State of Hawaii.

Sincerely,

A handwritten signature in black ink, appearing to read "Allen Frenzel".

Allen Frenzel

President, Malama Makaha
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(808) 343-4916

CC: Environmental Protection Agency

Exhibit A

Environmental Violation Report Submitted to the EPA on July 1, 2013

Suspected Violation Date:	05/23/2011
Suspected Violator Name:	State of Hawai'i Department of Transportation
Suspected Violator Address:	601 Kamokila Boulevard
Suspected Violator City:	Kapolei
Suspected Violator State:	Hawaii
Suspected Violator Zip:	96707
Still Occurring:	yes
Notified State DEP/DEQ/DEM:	yes
Department Contact:	State of Hawai'i Department of Transportation
Characterized incident as:	
Intent:	Unknown
Type:	Falsified
Media:	Documents
Entity:	Government

RE: Farrington Highway Replacement of Mākaha Bridges No. 3 and No. 3A
District of Wai'anae, O'ahu, Hawai'i Federal Aid Project No. BR-093-1(20)

EXECUTIVE SUMMARY:

The State of Hawaii Department of Transportation (HDOT) is about to start construction on a bridge replacement project for two bridges, which are part of Farrington Highway in Makaha Valley on the island of Oahu (Makaha Bridges Replacement Project). This bridge replacement project has been in the planning stages for over 10 years. The FEA and FONSI was approved and published on May 23, 2011. However, information was available to HDOT and its planning agency (RM Towill), and these parties knew or should have known that the FEA was incomplete and inaccurate and that the FONSI incorrectly characterizes the project. The parties knew or should have known that multiple environmental dangers exist that require completion of an EIS. The parties knew or should have known that their major design changes that occurred after publishing of their DEA should have required a new DEA be published at a minimum. They knew or should have known that "updated information" obtained requiring these last minute major design changes identified multiple environmental dangers requiring completion of an EIS. The HDOT and its planning agency knew or should have know that the environmental issues related to the "updated information" it received after its DEA was published were environmentally significant and changed the scope of the project to such a degree that a Finding of No Significant Impact is a false representation of the facts and situation. Moreover, the "updated information" acquired by HDOT and its planning agency was not incorporated into all phases of the project's design and construction. For example, the by-pass road being built in phase 1 (Pre-demolition) of the project now has a catastrophic design error in one of the temporary bridges and to-date HDOT has refused to admit the error exists and take actions to mitigate the design problem or delay construction. The Makaha Bridges replacement project must be stopped and the HDOT must be directed to perform and EIS before proceeding any further to avoid serious and long-term environmental damage.

PROJECT OVERVIEW:

The State Department of Transportation, Highways Division (HDOT), proposes to replace two existing wooden bridges along Farrington Highway, Route 93, between milepost markers number 13.95 and number 14.21 in Makaha on the Wai'anae Coast of Oahu (Figure 1-1). Farrington Highway is a two-lane principal arterial with 11-foot lanes and 3-foot paved shoulders. Constructed in 1937, Makaha Bridges No. 3 and No. 3A currently support two 11-foot lanes with a 2-foot shoulder on the makai (seaward) side of the bridge and a 1-foot shoulder on the mauka (landward) side. Both bridges have been classified by HDOT as deficient and require replacement. The portion of Farrington Highway that comprises the project site is located between Tax Map Keys (TMKs): (1) 8-4-002: Parcel 047 and (1) 8-4-010: Parcel 012. Both parcels are owned by the City and County of Honolulu.

Construction is estimated to occur in 2013 and last approximately 18 months. The total project cost estimate is approximately \$23 million. Funding sources will be from the Federal Highway Administration (FHWA) and State Highway funds. FHWA will contribute approximately 80 percent and the State of Hawai'i will contribute 20 percent of the funding needed for this project.

The purpose of this project is to replace two existing wooden bridge structures with two new reinforced concrete bridge structures to negate structural and safety concerns on the aging bridges. The existing timber bridges were constructed in 1937, with resurfacing of the travel way in the area of the bridges last completed in 1986. Although both bridges are regularly inspected and maintained to ensure integrity of the structures, it is desirable to replace the deficient structures to address existing substructure and superstructure conditions, poor hydraulic capacity, narrow bridge width, and inadequate shoulders areas.

The proposed replacement bridges will be designed to meet current design standards set by the American Association of State Highway and Transportation Officials (AASHTO), FHWA and HDOT. The replacement of the bridges will:

- Replace the existing timber bridges with new concrete structures, which will eliminate the potential for increased maintenance costs associated with the aging wooden bridges;
- Provide sufficient flow capacity to accommodate the 100-year flood event without overtopping or negatively impacting upstream properties by increasing the bridge openings;
- Provide new wider bridges to permit wider travel way widths and adequate shoulder areas; and
- Permit the installation of improvements to meet other requirements of AASHTO, FHWA, and DOT (i.e. improved bridge railings, guardrails and end treatments).

Farrington highway is a 2-lane principal arterial with 11-foot lanes and 3-foot paved shoulders. Makaha Bridges 3 and 3A support two 11-foot lanes with a 2-foot shoulder on the makai side of the bridge and a 1-foot shoulder on the mauka side. A 4-foot walkway is located on the mauka side of both bridges.

Both wooden bridges were built in 1937. In 2005, a study showed that the roadway received an average daily traffic (ADT) of 5,400 vehicles.

Makaha Stream is an interrupted stream that originates on the western slope of the Wai'anae mountain range deep in Makaha Valley. Makaha Stream flows under Bridge 3 and terminates behind a sand berm at Makaha Beach Park.

West Makaha Stream arises on the south slope of Pu'uukea'au and eventually flows under Bridge 3A. It is a relatively short intermittent stream that terminates into an approximately 100-foot long muliwai (a coastal estuarine pond). Neither stream has a permanent surface connection to the ocean. The two streambeds connect to each other on the makai side of Farrington Highway; however, they are usually blocked from the ocean by a sand berm at Makaha Beach Park. Water normally flows in this area only after heavy rains.

On the mauka side of Farrington Highway, along the West Makaha Stream is a salt marsh wetland. In the wetland, the muliwai is hyper-saline and surrounded by a heavy stand of pickleweed (*Batis maritima*). There are some kiawe (*Prosopis pallida*) and haole-koa (*Leucaena leucocephala*) trees scattered about the wetland.

The two existing wooden bridge structures will be replaced with reinforced concrete bridges. The replacement bridges will increase the travel way widths to 12-foot wide lanes in each direction and 10-foot wide shoulders to accommodate pedestrians and bicyclists. The proposed project will require: construction of an approximately 1,200-foot long detour road; demolition of the existing wooden bridge structures; construction of temporary bridges; construction of the new bridges, channel slope protection, and bridge appurtenances; relocation of utilities; restoration of the site; and, demobilization of construction equipment and materials. The roadways that will be affected include the segment of Farrington Highway approaching the two bridges, the portion of the highway that adjoins the two bridges, and an approximately 150-foot long segment of Kili Drive that intersects Farrington Highway. The total area involved will be approximately 3.8 acres.

In order to meet current roadway design requirements, the proposed project will require additional areas beyond the current right-of-way to accommodate the increased bridge spans and structures necessary for embankment protection, channel widening and guardrail improvements. The proposed wider right-of-way will affect lands on both sides (mauka and makai) adjacent of the project site. Additionally, the temporary use of construction parcels will be necessary during construction.

The anticipated plan for construction of the project will include the following in the Pre-demolition Phase (Approximately 2 months):

A. Construct By-Pass Road and Temporary Bridge Crossing Structures.

(1) Work will involve constructing the temporary by-pass road to route traffic from the north and south approach ends of Farrington Highway around the work area. The by-pass road will accommodate a tie-in or connector with Kili Drive that normally intersects with Farrington Highway. The portion of Kili Drive that will be affected will be approximately 150 feet long from its intersection with Farrington Highway. The by-pass road is planned to be approximately 1,200 feet long with two 10-foot wide travel lanes for each of the north and southbound lanes of traffic. A pedestrian path with a 4-foot minimum width will be provided. The by-pass road and connector with Kili Drive will be located on the makai edge of the Farrington Highway right-of-way, roughly adjacent to the Makaha Stream and West Makaha Stream bridge sections.

(2) Asphalt concrete or other DOT approved surface will be used to construct the by-pass road to accommodate public, private, commercial, and emergency services vehicles. The by-pass road crossing the stream at Makaha Bridge 3A will utilize prefabricated bridge structural elements to be determined by the design engineer. The temporary bridge is anticipated to span the entire stream channel and therefore will not require construction of center piers. The existing remnant railroad abutments at the site will be removed and new abutments constructed to accommodate the wider temporary bridge. The by-pass road crossing the stream at Makaha Bridge 3 will be constructed on embankment material with sheet pile shoring installed to support the construction. Pipe culverts will be used to allow stream flows to continue. The temporary stream crossings will be specified to handle the anticipated traffic load for the duration of construction. The by-pass road will be operated using appropriate traffic control devices and personnel to advise motorists to reduce speed and exercise caution. Police or personnel using flags will direct traffic and maintain safety of work crews during construction hours.

B. Relocate Utilities

C. Relocate Bus Stops

ENVIRONMENTAL ASSESSMENT ISSUES:

1. A Draft EA was published for public review in the July 8, 2009 issue of the State Department of Health (DOH), Office of Environmental Quality Control (OEQC), Environmental Notice. Comments were received during the public comment period. Unfortunately, public participation during the comment period was lacking and public oversight was not successful in ensuring the HDOT adequately considered all environmental issues impacted by their project. As a result, HDOT performed a less stringent evaluation in its EA process and intentionally or accidentally avoided critical environmental issues that should have triggered an EIS.

2. In the HDOT's own words on page I-6 of Section 1.3 of the FEA:

*"Since the publication of the Draft EA, **"updated information"** [emphasis added] has been obtained and additional analysis has been performed to confirm the flow conditions at the proposed replacement bridges. The results of the analysis indicate that the current single span design of the Bridge 3 replacement needs to be redesigned in order to accommodate the revised 100-year storm flow. An alternative to raise the elevation of the single-span bridge and roadway profile was not considered viable because the raised elevation could create a potential "damming" effect resulting in undesired higher flood elevation of upstream properties. Rather than raising the profile of the bridge, the replacement bridge has been designed to be a two-span bridge. The redesign of the replacement bridge will have minimal environmental impacts and will be limited to the widening of a small portion of the dry stream channel just upstream of the bridge to provide proper drainage."*

This "updated information" the HDOT admits to acquiring and using to drastically change the design of the Diamond Head side bridge was so significant in scope that the planning costs alone climbed from \$1.0 million to \$1.6 million dollars. The overall cost of the project increased by over 6 million dollars, the Diamond Head side bridge was enlarged from a one span to a two span bridge, and extensive stream channel reinforcement and excavation work was added to the project. Additionally, the scope of the project drastically changes the current FEMA flood plain and puts many upstream properties on the Diamond Head side of Makaha Stream in the flood channel while previous flood plain property on the Kaena side of Makaha Stream will be mysteriously protected by rip rap abutments and thereby becomes useable land suitable for residential building.

3. Of significant note, while the HDOT's "updated information" was used to drastically modify the design of the Diamond Head side bridge (Bridge 3), this "updated information" WAS NOT used to perform any redesign of the temporary by-pass road bridge that will be used while the Diamond Head side bridge is being rebuilt. In other words, the temporary bridge was designed using old, inaccurate drainage data and is incapable of handling the flow of floodwaters that it can be expected to receive while it is in operation. In fact, it is unknown if this "updated information" was used in the redesign of ANY of the project except for the Diamond Head bridge design, including environmental impacts.

4. Based on the intuitive analysis and gross calculations, it appears that the calculations for the temporary bridge replacing Makaha Bridge No. 3 were made before "updated information" results of a 2011 drainage study were completed by the project designer. This 2011 drainage study found Makaha Bridge No. 3 receives the majority of water flowing from Makaha Stream (80% now versus the previous known 20% of flow it received before the non-permitted construction of Kili Drive and other upstream construction work in Makaha Valley). Currently Makaha Bridge No. 3 has a flow-thru diameter opening of 392sf but the temporary bridge only has a flow-thru diameter opening of only 118sf as it is made up of only six 60" HDPE pipe culverts laid side-by-side and covered with gravel and asphalt. This is a significant shortfall in flow-thru capability and will result in a catastrophic failure of the temporary bridge when a heavy rain occurs in Makaha Valley. This capability disparity coupled with the observation that the other temporary by-pass bridge (the steel fabricated Makaha Bridge No. 3A) has enormous capability for the small amount of flow it must handle clearly shows the by-pass bridges were designed before the new "updated information" drainage data was acquired in 2011. While this planning shortfall was brought to the attention of HDOT in April of 2013, no actions have been taken by HDOT to acknowledge the

problem or take corrective actions. For a more thorough explanation of this issue, please view the short video at: <http://youtu.be/Z1om3yk3vhY>

OTHER ENVIRONMENTAL CONCERNS IGNORED BY HDOT:

1. An Environmental Impact Statements (EIS) was required by State law, but HDOT performed a much less stringent Environmental Assessment (EA):

a. An EIS for this major project encompassing the entire Makaha Beach SMA area was mandated by State Law and regulations. When this was brought to the attention of City Council via a public petition, the petition was ignored and not addressed by City Council. The City Council did not bother to discuss, refute, or even address the EIS petition filed by residents at City Council proceedings, except for Leeward District Councilman Mr. Tom Berg, who urged the City Council to demand an EIS be required for Resolution 11-282 to pass.

b. Pursuant to HAR Chapter 11-200-12, Significance criteria, there are 13 criteria or “triggers” of proposed coastal development projects that “shall” require an EIS be conducted by applicant for the SMA permit process. This major Makaha Bridges SMA project triggered at least 7 and up to 9 of these 13 criteria, and DPP and City Council did not abide by the State law in allowing this Resolution 11-282 SMA project to proceed without an Environmental Impact Statement to be conducted. Not only is the environmental impact significant at the Makaha beach area within the SMA boundaries, but this project if implemented will affect the whole Makaha Valley flood plain, future land uses and zoning changes, and have a very great long-term CUMULATIVE impact, that is required by law to be evaluated in approving such projects. The DPP and City Council should have never allowed this project or applicant to proceed with a self certified EA, when an EIS was required, and this was brought to the attention of City Council before they voted, yet they ignored constituents and district Councilman Tom Berg’s petition and plea for an EIS to be conducted for this large scale project, which will tear up the entire Makaha Beach area, and re-arrange half the entire Makaha Valley floodway.

2. DPP failed to hold a hearing on the accompanying Shoreline Setback Variance associated with the Makaha Bridges SMA in the Waianae District as required by ROH Chapter 25 provisions.

a. When Mr. Palmer and Mr. Ellis notified DPP in writing that they were prejudiced by not being able to attend the downtown scheduled public hearing, and requested a hearing in the district of the project as per Chapter 25 ROH mandates, DPP ignored their request, issued the Shoreline Variance permit to HDOT, and in writing told constituents including Palmer and Ellis they had a right to file a contested case hearing, at a filing cost of \$400, and failed and refused to abide by ROH Chapter 25 requirements. DPP also ignored a letter from the Waianae Neighborhood Board requesting the hearing to be held in the District of the project.

b. Chapter 205A mandates that in evaluating any development in the SMA areas, the DPP and City Council must apply and enforce the existing laws and conditions, such as a standing in effect Land Court Order, current Tsunami zoning, current FEMA Flood Way and other current parameters. The Chapter does not allow for an applicant to rely upon, nor the DPP or City Council to grant approval of a development based the “proposed flood boundaries” or the “proposed re-alignment” of Makaha Stream, or the “proposed channel design”, and other “changes” that are not allowed under CURRENT existing laws and conditions.

3. Kili Drive is an illegal dam/berm, was never completed, has been an illegal road for more than 40 years, and is a de facto built up dam/berm, dividing the FEMA AEF zoned Flood Way in Makaha Valley, and was connected to Farrington Highway without proper drainage

a. The DPP failed to disclose a conflict of interest as approving agency regarding the fact that Kili Drive should never have been allowed to connect to Farrington Highway, violated the Detailed Land Use Map of C&C, and was never properly completed or constructed. On the original construction plans, most of the approving signatures are missing; including the signature of Robert Way, then Planning

Department Director, and is also missing is the Highways Division signature. Of six required signatures, only two are shown.

b. The DPP approval of the submitted design of the project benefits DPP as well as applicant HDOT, both of which were negligent in allowing Kili Drive to connect to Farrington Highway in the first place, and was connected without proper drainage improvements at the intersection, which are the cause of up to 6-10 feet of fine silt being deposited over the years on the Kaena Point side of Makaha Stream mauka of Farrington Highway.

c. The proposed Bridge No. 3 channel design seeks to reinforce this illegally attained grade obtained by the 40+ years of Kili Drive acting as a berm across the Flood Way. The several feet thick of silt has been deposited on the C&C parcel and the HRT Kili Drive LLC parcel, across from Palmer/Ellis' on the opposite embankment area and all the way to Kili Drive. During several decades and many flooding events, floodwaters have been blocked from flowing freely through the flood plain, and allowing excess floodwater to access bridge 3A, by Kili Drive which formed a dead end bermed in area along with Farrington Highway, for silt deposits. Kili Drive cuts across a FEMA designated AEF zoned Flood Way, and from 1970 to 1995, was higher in elevation (about 14 feet road surface level at the intersection with Farrington, and rising thereafter going inland) than the Base Flood Elevation of the AE zoned and permitted homes in the same 100 year flood hazard zone. When Kili Drive was built the owners filled the natural grade to a much higher grade to build Kili Drive, which then served as a berm preventing free flowage of water across the flood plain Subsequent floods and siltation caused by Kili Drive berm, has resulted in a grade of 12' or more feet high on the Kaena side of Makaha Stream across from the residential side (Palmer /Ellis side), and Palmers and other homes having a permitted grade of 10 feet, on the Waianae side of Makaha Stream. The HDOT project plans include installing rock embankments or rip rap, using only 10 FEET high on the residential /Waianae side of Makaha Stream and 12 FEET high illegal grade on Kaena Point side, mauka of the new Bridge.

4. The DPP intentionally misrepresented a material fact in response to Leeward District Councilman Tom Berg's questioning about the permit history of Kili Drive:

a. Before the City Council voted on the resolution 11-282, Leeward District City Councilman Tom Berg questioned the DPP Deputy Director at the public hearing as to whether Kili Drive was properly permitted from its connection to Farrington Highway all the way up to the Makaha Towers Condominiums. The DPP Deputy Director said he would have to check the DPP records and get back to Tom Berg. Two days later, after hearing nothing from DPP, Mr. Berg followed up with a written request. In a written response from DPP Director sent from David Tanoue, DPP Director, to Tom Berg and City Council, the DPP Director misrepresented the material fact that Kili Drive, was all prim and proper, when in fact Kaena Road, or Kili Drive, under either name, was never supposed to connect to Farrington Highway, was in violation of the Land Use Policy, and was NEVER completed properly, or with proper drainage or improvements.

b. The importance of this intentional misrepresentation to Tom Berg and City Council members and Chairman by DPP cannot be understated, and the importance of hiding the Kaena Road/Kili Drive conundrum history from the City Council, and the Public, cannot be understated, and the effect of Kili Drive on the entire goal and project design submitted by applicants cannot be understated. The HDOT, DPP, HRT Kili Drive LLC, and the City and County of Honolulu (owner of the parcel across from Palmer), ALL benefit from the project design, greatly by utilizing the illegal higher grade which has silted in over the past decades, and to the detriment of nearby residents' properties. Even applicants own EA study references nothing but silt deposited in the area mauka of Bridge 3 across from Palmer which is bermed in by Kili Drive, noting silt up to 7 feet deep on the surface, without even a pebble in there, all deposited from previous floods, because blocked from free flowage by Kili Drive across the flood way. Having Kili Drive for all these past 40 years cutting the Makaha Valley flood way in half is analogous to allowing an elevated road to traverse across the entire Kaiwanui Marsh in Kailua, cutting the flood way in half, which would never have been allowed to fester for 40 years without correction!

c. In addition, the DPP "Kaena Road" construction plans show a drainage culvert pipe as being in place passing underneath Kili Drive from the Waianae side to the Kaena Point side of Kili Drive a few feet mauka of the connection of Kili Drive to Farrington Highway, with elevation of the pipe at the base of the pipe of 10 FEET in elevation. However, residents who have resided at their current addresses for decades, and are extremely familiar with the intersection of Kili Drive and Farrington Highway, see no such drainage pipe in place, as was supposed to be placed there. The significance of this missing pipe is enormous. If the pipe was there as originally engineered, then water could at least flow through that pipe adjacent to Farrington Highway, at an elevation of 10 FEET above sea level, and the ditch that was originally there would have been preserved, at a level of 10 FEET, with flowing water through it and thus the surrounding area silt and would not have built up to the current situation of 14 FEET grade level at the edge of Kili Drive, and 12 FEET high at the Kaena Point side embankment of the Makaha Stream. All this area has built up over the many years due to no drainage pipe underneath Kili Drive at this intersection as originally designed in the construction plans. If indeed such pipe was ever installed, it has been buried under at least 4 FEET of silt for decades, and never functional for its drainage purpose, which is negligence of the C&C owner of said parcel, or HRT Kili Drive LLC, one of which would have been responsible to maintain the pipe to keep it functional. If the pipe is not there, it proves residents' assertions that "Kaena Road" was never constructed nor completed properly and lacked proper drainage requirements.

d. In a further bizarre twist, the questionable "access road" shown on the applicants "Makaha Stream Channel Plan" sure enough actually has TWO connections, one to Kili Drive and one to Farrington Highway, which is a very odd design, and nearly unexplainable, except that it exactly serves DPP's and HDOT's and C&C's ulterior undisclosed purpose to finally after 40 years "legalize" the illegal connection of Farrington Highway to Kili Drive, via HDOT purchasing the first 40 feet of Kili Drive in their project proposal plans, and then by boxing in the Kili Drive culvert drain pipe if it even exists, so as to make the lack of drainage for 40 years a moot issue, being surrounded on all sides by 14 + feet high asphalt!

e. The DPP and HDOT did not disclose this fact to Tom Berg and the rest of City Council, and this drainage pipe that SHOULD BE THERE, but is not there or hasn't functioned in 40 years, is the direct cause of the illegal higher elevation of the embankment area across from Palmer, and the area between the Makaha Stream and Kili Drive across from Palmers and other residences, extending several hundred feet upstream of Bridge 3. This is the exact area where HDOT proposes to reinforce the illegal higher grade to the detriment of nearby residents' properties across the Makaha Stream, who are lower in elevation. DPP, HDOT, RM Towill, and HRT Kili Drive LLC, all knew or should have known, and DPP knew or had a duty to know, that the lack of drainage and lack of a drainage pipe depicted on the construction plans, would result in flooding to nearby residents' properties over the years, which it has, by elevating the flood way via silt buildup, to a higher elevation than permitted residences on the Waianae side of Makaha Stream mauka of Bridge 3. When Councilman Tom Berg asked DPP a direct question, whose purpose was clear, to gain a clear understanding of the history and permitting of Kili Drive, the DPP Director, after nearly two weeks, wrote a deceptive reply to Tom Berg and City Council.

5. City Council did not follow own procedures re: Zoning Committee adopted minutes:

a. The adopted minutes from the October 10, 2011 meeting of the Zoning and Planning committee at City Council had instructed the applicant HDOT to submit to FHWA plans for the Bridge 3 channel design WITHOUT the objected rip rap to see if HDOT could get federal approval for a design without the rip rap embankments.

b. On Feb. 9, 2012 HDOT (applicant) and RM Towill (the HDOT consultant) did not show up at the scheduled hearing, and did not notify the committee prior or during the hearing of any reason for their absence. Further, they had NOT submitted any plans to FHWA as the committee had instructed them to do. The Zoning and Planning committee allowed the February 9, 2012 hearing to go forward, without applicants or their consultant present, and never discussed or referenced the fact that the minutes and instructions of the Zoning Committee were never followed, as if they never existed. This was a denial of due process in that they relied upon the committee instructions and adopted minutes as binding upon applicants.

6. The Makaha Stream favors the North West direction of the lower reaches of Makaha Valley. This project seeks to force the Makaha Stream to the directly opposite side of the lower valley, to the South East side of Makaha Valley, directly against its natural flow direction:

a. In the applicant's own EA study conducted for this project, it is stated that the Makaha stream favors the North West direction in the lower reaches of the Makaha Valley. The project design of the channel mauka of Bridge 3, with the added curved inward and higher rip rap reinforced rock embankment on the Kaena Point side of the Makaha Stream across from Palmer houses, as shown on applicant's submitted "proposed flood boundary" map drainage report, will serve to restrict and direct the Makaha Stream against the South East /Waianae side of Makaha valley and up against permitted homes, not just at Bridge 3, but farther up at Nukea Street and Manuku Street where applicant's own submitted maps show the 100 year flood plain will be pushed toward the residential zoned properties and away from the current flood way, and in the South East side of the valley, directly opposite of the NATURAL FLOW direction as stated in applicants own EA study. Furthermore, and miraculously, the infamous Kili Drive emerges as not even within the flood way anymore, after 40 years of illegally blocking the flood way! HRT Kili Drive LLC, who owns dozens of acres of AEF Flood Way zoned land off of Kili Drive will then be free to seek re-zoning to residential or other higher uses, to the detriment of nearby residents' properties.

b. There will be a drastic and permanent reduction in available flood way, which a drastic change in a natural resource, not discussed or accounted for by DPP or City Council, as a long-term effect of the project. Future floodwaters must go somewhere, most likely, as HDOT admitted, through the residents' homes and properties.

c. The design on its face is obviously designed to protect HRT Kili Drive LLC's embankment, which is zoned AEF Flood Way. The rip rap on the Kaena Point side is curved toward the center of the Makaha Stream and will greatly skew the stream toward the AE zoned residences on the Waianae side of the stream. Mr. Ikaika Anderson, during City Council Zoning and Planning Committee hearing, asked the HDOT and RM Towill engineers, if with all the new concrete bridges being constructed all across the State, whether they could point to a similar curved inward rip rap design for any other bridge. They could not produce a single example. The reason is that there doesn't exist anywhere such an asinine design, to build a 15 Million dollar longer span concrete bridge and then block off half of the channel approaching the bridge with rock rip rap! The whole purpose of this obviously strange design is to protect HRT Kili Drive LLC embankment and skew the Makaha Stream toward the residences and violates the 1951 Land Court Order.

7. The entire project design and alteration of Makaha Stream go directly against the Land Court Order No. 10157, filed March 7, 1951:

"an easement for the free flowage of water through the natural stream beds as noted and shown on said map be noted on said certificate of title in favor of all interested in said free flowage of water through said natural stream beds."

This covenant appears on the C&C parcel, and the HRT Kili Drive LLC parcel, across from adjacent residents' properties on the other side of Makaha Stream.

a. HDOT proposes to purchase portions of the above properties currently owned by C & C of Honolulu, and HRT Kili Drive LLC, and to then alter the Makaha Stream channel on that land, which will be a violation of said land Court Order.

b. City Council, prior to voting to approve the project, received testimony and was provided a copy of Land Court Order No. 10157, filed March 7, 1951; and City Council was advised that property home owners along the Makaha Stream opposed any Makaha Stream alteration or realignment and the adding of un-natural rock rip-rap reinforced embankments along the Makaha Stream channel, including the curved inward design, which artificially blocks the natural flowage of Makaha Stream, the rock rip-rap reinforced embankment and "access road" with two (2) entrances, connecting to Farrington Hwy and Kili Drive.

(1) Bridges 3 and 3A are the “mouths” of the outflow of floodwaters for the whole Makaha valley, originating from “pueo falls” deep in the back of Makaha valley. The Makaha Stream(s) flow down and through the Makaha valley flood plain, and then exit to the ocean under Makaha bridges 3 and 3A.

(2) Makaha Stream carries the vast majority of the Makaha Valley drainage to Bridge 3, since the West Makaha Stream was diverted into Makaha Stream in the upper valley years ago.

(3) The Makaha Stream, when flowing and after exiting under and through Bridge 3, makes a 90 degree right turn immediately after passing under Bridge 3, heading toward Kaena Point direction, and along and parallel to Farrington Highway, and then meets bridge 3A, and the water actually runs back inland under Bridge 3A, an area which is several feet lower than on the other side of Kili Drive, caused by Kili Drive blocking sediment and silt from reaching or depositing in that area for decades.

(4) The proposed Makaha Stream curved rip-rap and accompanying questionable design access road, will artificially alter and reinforce the Kaena Point side embankment of the Makaha Stream with the result that Makaha Stream will be forever forced against the South East side of Makaha Valley, opposite of its natural flow direction to the North West.

(5) The “Orange” CURRENT flood boundary and the “Blue” proposed flood boundary maps of consultant RM Towill Corporation, sums up the result of this added rip rap curved inward alteration. In fact, as shown by the applicant’s consultant’s “proposed flood boundary maps”, the curved rip rap actually skews the flow, direction, and stream bed of Makaha Stream to the South East side of Makaha Valley, essentially all the way up Makaha Valley. The rip rap design, and its resultant change of the natural flow of Makaha Stream of Bridge 3 directly violates the Land Court Order.

c. The March 7, 1951, Land Court Order is still listed as a covenant and encumbrance on Kili Drive itself, City & County lands adjacent to Makaha Stream, HRT Kili Drive LLC parcel(s) adjacent to Makaha Stream and encompassing Kili Drive, and these are the parcels that HDOT intends to install the channel altering rip rap.

d. Further, local residents assert that the “natural stream beds” noted on the applicable Land Court Order, include all designated flood way areas, which are part of the natural flow and vis a vis part of the stream bed during high run-off events. Makaha Stream being normally a dry stream, the flood way associated with Makaha Stream is a critical adjunct area necessary to handle what are often flash flooding events in the Makaha valley.

8. The Hawaii Supreme Court Decision No. 2956, issued on January 26, 1956, in David Orth Klausmeyer and Marie Blackwell Klausmeyer vs. Makaha Valley Farms Ltd; Makaha Beach Co. Ltd; Waianae Village Properties Ltd; and Capital Investments Ltd; established that one may not engage in activities or actions on one’s property that could adversely over time lead to the failure or undermining of another owners adjacent or nearby property.

a. Ms. Moana Kea Klausmeyer-Among’s parents purchased the property currently owned by Ms. Klausmeyer-Among, in 1947, and built the house still standing on the property. Her parents in the early 1950’s, had cause to file a Court action against developers who were mining the sand commercially off Makaha Beach. In a landmark decision of the Hawaii Supreme Court in 1956, the Court ruled that such an endeavor may undermine the property of another by reducing the support of the embankment or land itself by the removal of adjacent sand or other support. This is the same notion that a neighbor may not excavate deeply near another neighbors home or building such that it may cause the adjacent owners ground to fail or be more subject to natural calamities, than if such excavation was not present, and the ground was solid. This Hawaii Supreme Court decision is a landmark decision often referenced in other proceedings. This decision should protect them from the adverse results that implementation of HDOT’s Bridge 3 design and channel changes would bring about, exactly encroaching and weakening the ground underneath nearby structures and properties, by bringing the embankment closer to their homes, and bringing water saturated soil and sand closer to their structures, when the natural flow of Makaha Stream is away from these properties.

b. HDOT has plans to excavate the Palmer embankment significantly, up to within about 10 feet of his home, removing a stable extended much wider embankment that has been solid for decades, which will become flood way. The property owner to the mauka rear of Palmer embankment will lose that embankment to flooding, lacking the previous support of the Palmer extended embankment, and thus the Supreme Court Decision of 1956 will have been violated against additional owners of real property. Those property owners asked HDOT at public hearings whether their property would have any portion of their property or embankment, currently both being entirely in the AE flood fringe zone, re-designated as AEF Flood Way for any portion of their property. The HDOT has refused to answer the questions.

9. City Council failed to address repeated misrepresentations in testimony of applicants and their consultants at public hearings, and misrepresentations in maps/design drawings submitted by applicants:

a. Constituents in the project area brought to the attention of City Council that the applicant's maps and drawings depicting the project design showed many misrepresentations of the Makaha Stream center, as shown on maps submitted to DPP and to City Council. The DPP and City Council ignored these misrepresentations of project drawings, and did not question applicants whatsoever as to the drawings submitted.

b. Director of DPP testified Oct. 4, 2011 the Makaha bridges project was "not designed to address any flooding issues" but in fact applicants seek to submit a drainage report and new flood maps that eliminate half the flood plain in Makaha Valley, and change the land zoning all the way up the valley, greatly benefitting HRT Kili Drive LLC and other large landowners to the detriment and loss of land to other adjacent residents.

10. City Council and DPP failed to apply existing laws as required by HRS 205A-2(c)(7)(A), in approving the project resolution:

a. The existing laws and policies in effect are to be enforced and applied to SMA projects. The existing law is the Land Court Order No. 10157, of March 7, 1951, and the Supreme Court decision of 1956, and the current EIS requirements, and current DPP public review policies and procedures for holding hearings in the proper district where the development is to take place.

b. The current FEMA Flood Zones, current Tsunami zones, and other CURRENT laws have been ignored by DPP and City Council in approving this SMA project. The current illegal condition and existence of Kili Drive has been intentionally misrepresented. For example, when a constituent owning a property along Makaha Stream adjacent to Palmer testified before City Council that the Council did not have jurisdiction to over rule the Land Court Order of 1951, and did not have authority to approve the applicants intended alteration of Makaha Stream's natural flow with completely un-natural rip rap rock embankments in the channel, and that the constituent was invoking the applicable Land Court Order in favor of no rip rap, the City Council ignored him and passed the Resolution 11-282 project as designed, as if there was no such testimony made.

11. Failure of DPP to disclose CONFLICT of INTEREST to City Council or public: The DPP failed to reveal a conflict of interest with respect to the history of Kili Drive. There has been 40 years of negligence by DPP, and the City and County of Honolulu, as owner of the parcel wherein Kili Drive connects to Farrington Highway. DPP failed to reveal to City Council a bias and conflict of interest in evaluating applicant's project and design, in that DPP and HDOT both benefit greatly by the proposed design, while residents are threatened with condemnation and flooding. The City and County of Honolulu, as owner of the parcel that allowed the improper connection of Kili Drive to Farrington Highway, and failed to ensure proper drainage and engineering of said connection, also have a conflict of interest, or bias to favor HDOT and DPP in this matter, to detriment of nearby residents, that was not disclosed to constituents by City Council at the public hearings on this project. The City Council has a conflict of interest in not disclosing the City and County negligence regarding Kili Drive, which was brought up repeatedly in the hearings. With such conflict of interest and bias toward solving their own conundrum of issues involving Kili Drive, DPP should not be allowed legally to be the approving agency for this SMA project.

12. Applicant HDOT has throughout the entire public review process and upon specific requests, refused to release Hydraulic, Hydrological, Survey, and Drainage and Flood studies and data, thus residents have been unable to ascertain the true nature of the project impacts to their properties and the area. The DPP and City Council failed to require applicants to release such directly relevant and pertinent studies and data, even though residents and other constituents continuously requested access to the data. When City Council questioned the applicant whether they were willing to release such studies, the HDOT replied it is HDOT policy not to release such data and studies until AFTER the project is completed.

13. HRS Chapter 205A-2(a)(9c)(6)(C) section violated in issuance of SMA permit by DPP and City Council.

a. The fact that the project design will protect currently zoned AEF Flood Way vacant property to a mean level of 12 feet, which will remain dry and un-eroded and not inundated during flood waters rising above 10 feet mean elevation, but lower than 12 feet mean elevation. This curved rip rap design at 12 feet high, will result in the extra two feet deep of flowing water having to flow over and through the currently zoned AE residential properties, including Palmer property, in order to exit to the Bridge. This "sloshing" of floodwaters caused by the bottleneck the curved inward rip rap forms mauka of Bridge 3 is undeniable, and will occur from this submitted channel design, and this obviously ADVERSE result to the residential properties is not directly related to a "No Rise Certification" which will be highly touted by applicants. This certainly violates the above Chapter 205A-2(a)(c)(6)(A) requirement that approving bodies must:

"Ensure that developments comply with requirements of the Federal Flood Insurance Program"

b. The negative effect on Palmers property will be dirty and disease causing flood waters, and resultant left over mud and stagnant sludge, left over after a 10-12 foot flow event, while the AEF Flood Way opposite embankment remained high and dry and had no inundation.

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Exhibit B

Potential Catastrophic Design Error, Temporary By-Pass Route

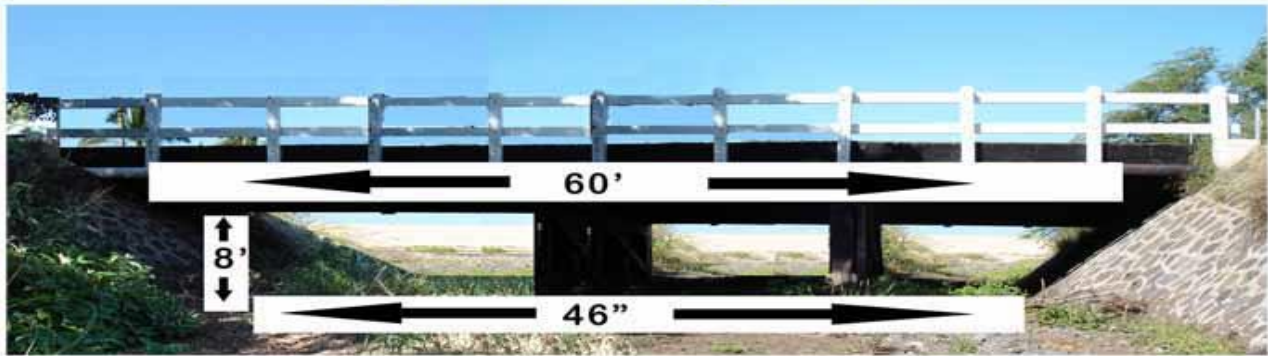
1. Late in the design phase, substantially significant drainage data was acquired by the project designer that required an additional \$6 million for project changes primarily for design changes made to bridge #.3 The design change ordered in March 2010 raised the design costs alone by \$600K to a total of \$1.6M, a 60% increase. These last minute changes resulted in bridge #3 being lengthened from 69' to 89'. Bridge #3 was changed from a one span design to a two span bridge to handle the increased flow of water it must accommodate. These significantly material design changes occurred almost a year after the review period for the Draft EA, which was published in May 2009. However these design changes were not considered important or of enough significance to require an altering of the findings in the Final EA; nor were there any supplement hearings made to announce the changes and offer an opportunity for public review and comments. The final EA only provided the following additional comments: *"The redesign of the replacement bridge will have minimal environmental impacts and will be limited to the widening of a small portion of the dry stream channel just upstream of the bridge to provide proper drainage."*

2. **However**, from a review of all available documents and drawings it appears that the significant change in **new drainage data** that was used to alter the design of bridge #3 **WAS NOT used for redesign of the temporary by-pass road**. The same substantial increase in stream flow under bridge #3 must also be accommodated by the temporary bridge immediately downstream, but it appears that the planners (RM Towill) simply didn't think to go back and redesign the temporary bridge replacing bridge #3. It does not seem possible and the raw numbers do not even remotely confirm that six 60" culverts can handle the enormous flow of water coming down Makaha stream under bridge #3, given the new data in the drainage study.

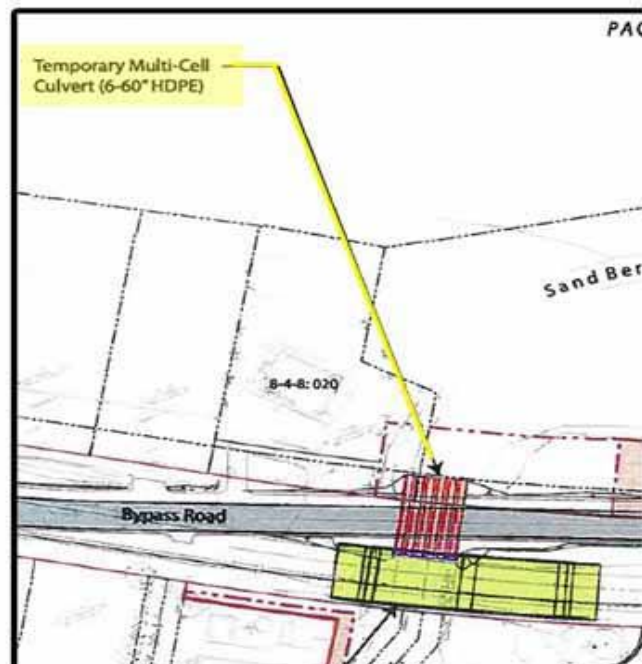
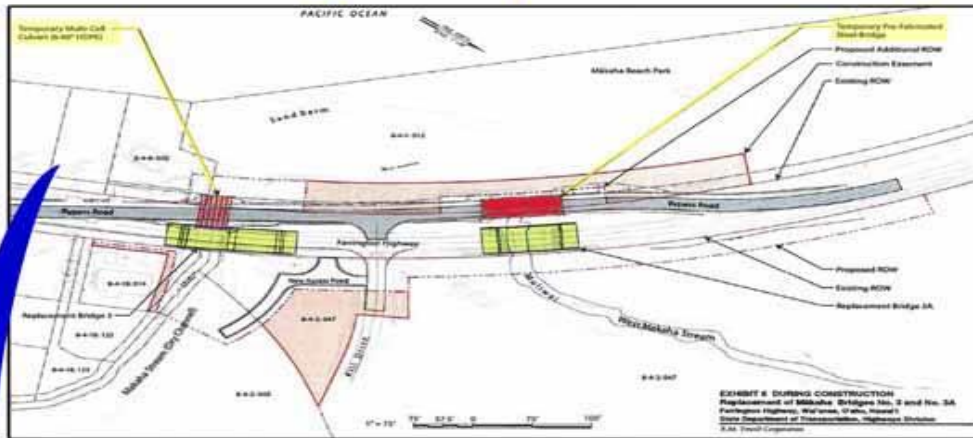
3. Based on gross calculations, it appears that the stream flow calculations for the temporary bridge replacing Makaha Bridge #3 were made before "updated information" results of a 2011 drainage study were completed and made available to the project designer. This 2011 drainage study found Makaha Bridge #3 receives the majority of water flowing from Makaha Stream (80% now versus the previous known 20% of flow). Currently Makaha Bridge #3 has a flow-thru diameter opening of 392sf but the temporary bridge only has a flow-thru diameter opening of only 118sf as it is made up of only six 60" HDPE pipe culverts laid side-by-side and covered with gravel and asphalt. This is a **significant shortfall in flow-thru capability** and could result in a **catastrophic failure of the temporary bridge** when a heavy rain occurs in Makaha Valley. This capability disparity coupled with the observation that the other temporary by-pass bridge (the steel fabricated one for Makaha Bridge #3A) has enormous capability for the small amount of flow it must handle clearly indicate the by-pass bridges were designed before the new "updated information" drainage data was acquired in 2011. While this planning shortfall was brought to the attention of HDOT in April of 2013, no actions have been taken by HDOT to acknowledge the problem or take corrective actions. For a more thorough explanation of this issue, please view the short video at: <http://youtu.be/A01sUMwFXJM> and the following diagrams.



Makaha Bridge No. 3



Makaha Bridges Replacement Project



Potential Catastrophic Design Flaw*

Flow-thru capacity of Makaha No. 3

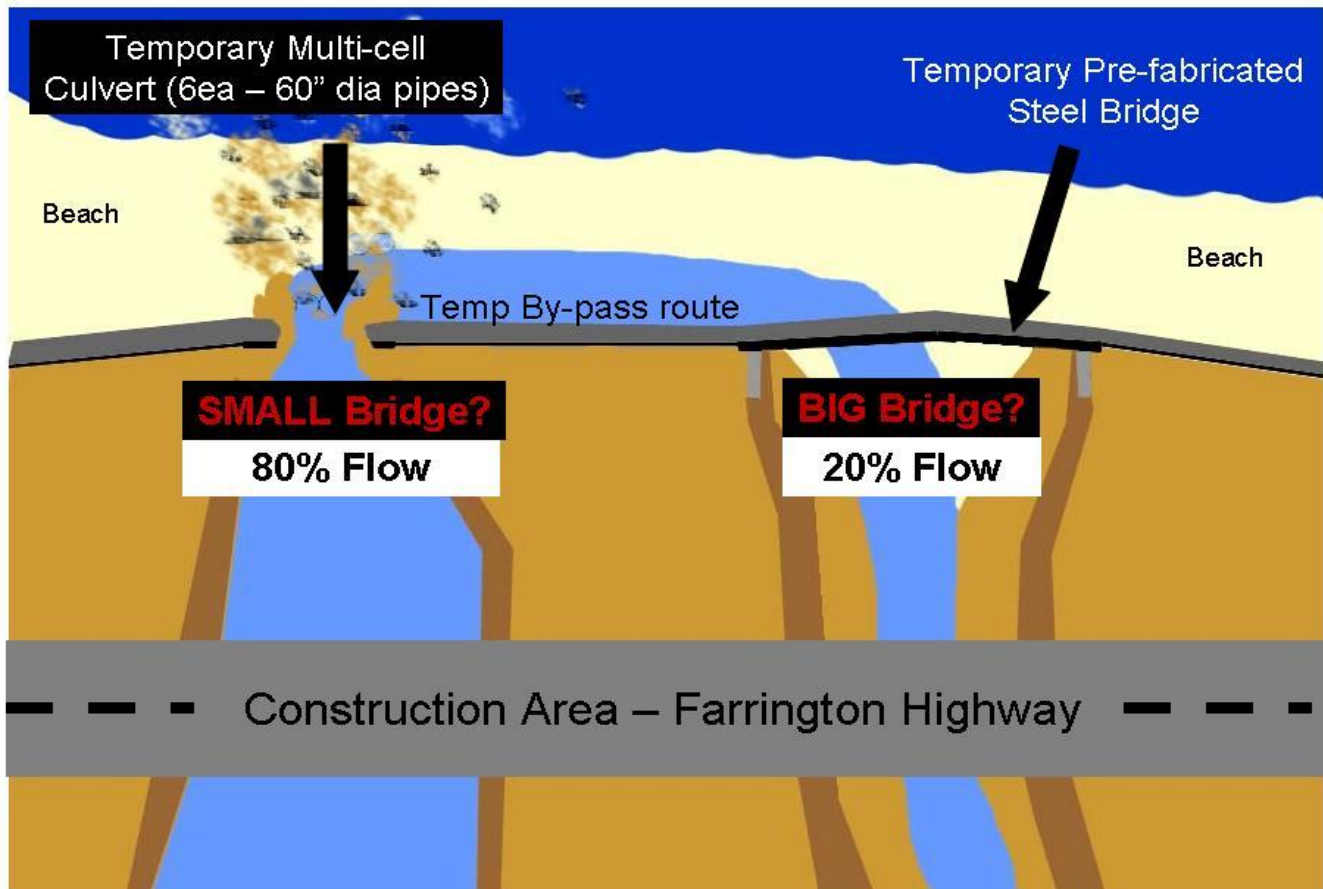
$$(368\text{sf} + 56\text{ sf}) - 32\text{sf} = 392\text{ sf}$$



Flow-thru capacity of Temp Bridge replacing Makaha Bridge No. 3

$$19.6\text{sf} \times 6 = 118\text{sf}$$





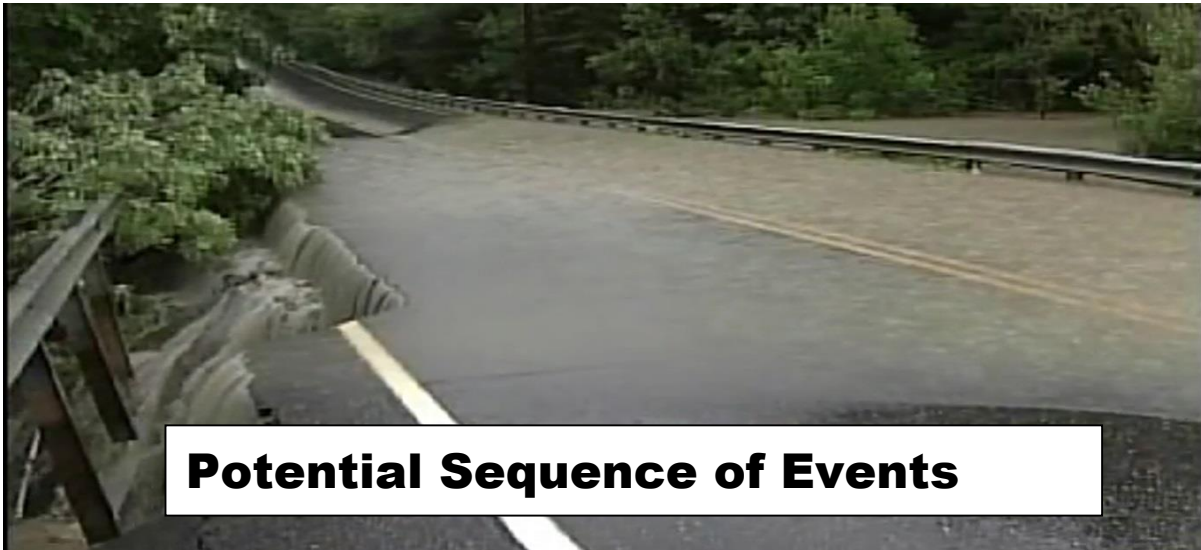


Exhibit C


Extract (pages 3-5 thru 3-7) of Final EA for Farrington Highway Replacement of Mākaha Bridges No. 3 and No. 3A - Federal Aid Project No. BR-093-1(20) - May 2011

Farrington Highway Replacement of Mākaha Bridges No. 3 and No. 3A

is undesirable based on existing conditions involving seasonal periods of heavy surf which could damage the new bridges and adjoining segment of the highway, and pose increased and unnecessary risk to public safety.

3.5 DESIGN ALTERNATIVE 4 – REPLACE BRIDGES WITHIN MAUKA REALIGNED HIGHWAY

This alternative is similar to Design Alternative 3, with the exception that Farrington Highway would be realigned from its present location and moved further mauka from the shoreline. Construction activities would involve the major realignment of Farrington Highway as well as replacement of the existing bridge structures with wider structures, construction and removal of a temporary detour road, relocation of utilities, and installation of pavement markings.

 **WRONG - No Temporary road is needed! (saving \$ millions)**

Shouldn't this be a primary criteria for the project?

The primary benefit of this alternative is that a portion of Farrington Highway would be relocated away from tidal influences during winter and heavy surf conditions. It would increase the width of the travelway in both directions of traffic and increased space would be made available on the bridge shoulders for pedestrians and bicyclists. The replacement bridges would be constructed to meet current design standards for bridge structures, but would require major effort to realign only a relatively short segment of Farrington Highway.

The following arguments ignore everything related to the Makaha Beach Master Plan

This Design Alternative would also require the need to identify and acquire new DOT right-of-way. Properties that adjoin the existing project site include residential, private, and governmental land. Depending on the final alignment properties that could be impacted include multiple single-family residences, the Mākaha Beach Park owned by the City and County of Honolulu, two parcels owned by telecommunications utilities (AT&T and Pacific LightNet Inc.), and other undeveloped parcels.

The process for acquisition of new DOT right-of-way would be similar to Design Alternative 3 and would also involve major impacts to landowners because of loss of all or a portion of their existing properties. As previously identified, the factors that would need to be considered include:

- Design and engineering effort would be required for the portion of the new alignment that will need to connect the northwest end of Mākaha Bridge No. 3A and the southeast end of Mākaha Bridge No. 3 with Farrington Highway;
- Design and engineering effort for a new highway segment between the proposed new bridges along the highway;
- Negotiation and determination of costs associated with compensation to landowners for acquisition of property. This would include administrative costs for negotiation, property appraisal, and processing and coordination of legal documentation necessary to complete the land transactions; and
- Depending on the proposed realignment of the highway there will be potential for additional environmental impacts to land and social impacts to landowners that would require further evaluation and assessment. This would include potential for the filing of environmental/land use permit applications beyond those identified for Alternative No. 2, as described in this document.

The time, effort, and projected expense required for Design Alternative 4 would exceed that of all other alternatives considered. A preliminary estimate is that several years would be required to: (1) obtain major new funding for a highway realignment that includes compensation for acquisition of new property as well as construction of two new bridges; (2) coordinate the design and engineering of a realigned segment of Farrington Highway with adjoining and affected property owners and governmental agencies; (3) acquire and record property for new highway right-of-way by negotiation or condemnation; and (4) identify, prepare, file, and process major environmental entitlements and studies such as an Environmental Impact Statement (EIS)/EA and environmental and land use permits. Construction costs would involve not only the expense for two new replacement bridges, but the added expense for a new segment of highway.

While this alternative meets the stated purpose and need of the proposed project, it is similarly not considered a viable nor feasible alternative and is also rejected from further consideration due to: (1) the need for acquisition of new highway right-of-way is undesirable because of potential for major economic and social disruption to property owners; (2) when considered in light of the Preferred Design Alternative 2, this alternative would unnecessarily exceed the

stated purpose of the proposed project which is to replace two existing deficient bridges (e.g., structurally deficient and functionally obsolete); and (3) this alternative as well as Design Alternative 3, would require not only the replacement of the existing bridges, but the major realignment of Farrington Highway for only a relatively short segment along the area of the Mākaha Beach Park.

3.6 BY-PASS ROAD ALIGNMENT ALTERNATIVES

Mauka or makai alignment alternatives for the by-pass road were also considered by HDOT. The mauka alternative was rejected for the following reasons:

- A coastal estuarine pond (*muliwaʻi*) exists along the mauka side of Bridge 3A. Construction of a by-pass road on the mauka side of the project area would result in significant adverse effects to the *muliwaʻi*; and
- An existing residence located mauka of the western end of the project site, next to Bridge 3, is situated approximately 30 feet away from the existing right-of-way. This narrow width cannot accommodate a temporary by-pass road without causing significant property, noise, and traffic impacts to the homeowner, as well as interfering with construction of the proposed bridge structure.

Because of these existing conditions that encumber the possibility of a by-pass road along the mauka-side of the project area, the only alternative available is a temporary by-pass road built along the makai side of the project site.

These are the ONLY two reasons a by pass road has to go onto the beach an encroach the certified shoreline????



Oahu

Regional Transportation Plan 2035





Can the State DOT guarantee the Makaha Bridges Replacement Project will not cancel Project 50?

Table 7 Oahu Regional Transportation Plan 2035 Project List (continued from previous page)

Project No.	City/ State	Facility/Project Title	Project Description	Estimated Cost in \$M (\$YOE)
40	S	Vanpool Program	Continue implementation and expansion of the State's Vanpool Hawaii Program.	\$88.1
Safety And Operational Improvement Projects—2021 to 2035				
50	S	Farrington Highway, Safety Improvements, Makua Valley Road to Alinui Drive	Construct safety improvements on Farrington Highway along the Waianae Coast, from Makua Valley Road (Kaena Point) to Alinui Drive (Kahe Point). This project includes realignment around Makaha Beach Park, between Makau Street and Water Street.	\$209.0
51	S	Highway Safety Improvement Program	Implement various safety improvements to reduce collisions and damage to property. Strategies may include installation of left turn lanes, roadway widenings, traffic signal modifications, installation of rumble strips and crash attenuators, installation of guardrails and bridge railings and others.	\$21.2
52	S	Rockfall Protection, Various Locations	Install rockfall protection or mitigation measures along various State highways at various locations.	\$75.0
53	S	Shoreline Protection Program	Kamehameha Highway and other locations.	\$30.0
Congestion Mitigation Projects—2021 to 2035				
54	S	Farrington Highway, Widening, Hakimo Road to Kalaheoa Boulevard	Widen Farrington Highway from four to six lanes, from Hakimo Road to Kalaheoa Boulevard, including intersection of Luahalei Naval Road.	\$233.1
55	C	Kamakila Boulevard	Extend as four-lane roadway between Franklin D. Roosevelt Avenue and Saratoga Street.	\$24.2
56	C	Fort Barrette Road	Extend as four-lane roadway between Franklin D. Roosevelt Avenue and Saratoga Street.	\$10.7
57	S	Kalaheoa East-West Spine Road, New Roadway, Kalaheoa Boulevard to Geiger Road	Construct a new four-lane, east-west spine road within Kalaheoa by realigning and connecting portions of the existing Saratoga Avenue from Kalaheoa Boulevard in the west and to Geiger Road in the east.	\$271.1
58	S	Makakilo Mauka Frontage Road, New Roadway, Kalaheoa Boulevard to Makakilo Drive	Construct a new two-lane Makakilo Mauka Frontage Road, mauka of Interstate Route H-1, from Kalaheoa Boulevard to Makakilo Drive.	\$18.2
59	S	Farrington Highway, Widening, West of Fort Weaver Road to Waiawa Interchange	Widen Farrington Highway from Kunia Road to Waiawa Interchange by one lane in each direction, from west of Fort Weaver Road to Waiawa Interchange.	\$130.8
60	S	Interstate Route H-2, New Interchange, Pineapple Road Overpass	Construct a new full-service freeway interchange on Interstate Route H-2, between Meheula Parkway and Ka Uka Boulevard, to accommodate future developments in Central Oahu. This project includes the widening of the existing Pineapple Road Overpass from two lanes to four lanes, and addition of new on- and off-ramps to and from Interstate Route H-2 at Pineapple Road Overpass.	\$102.5
61	S	Interstate Route H-1, Widening, Waiawa Interchange to Halawa Interchange	Widen the Interstate Route H-1 by one lane in the eastbound direction, from the Waiawa Interchange to the Halawa Interchange.	\$540.3
62	S	Kahehiki Highway, Widening, Kamehameha Highway to Haiku Road	Widen Kahehiki Highway from two to four lanes, from Kamehameha Highway to Haiku Road. This project also includes the following improvements: <ul style="list-style-type: none">• Contraflow in existing right-of-way between Hui Iwa Street and Haiku Road• Intersection improvements at Hui Iwa Street and Kamehameha Highway	\$75.0
Transit Projects—2021 to 2035				
63	C	City Rail Rehabilitation and Fleet Expansion	Provide for rehabilitation of track and expansion of rail fleet.	\$203.0

* Projects that are included in or are consistent with the City's or State's bicycle plans