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Minutes Regular Meeting

Mauna Kea Management Board
Monday, July 24, 2006

Kukahau`ula, Room 131
640 N. A'ohoku Place
Hilo, Hawai'i 96720

Attending

MKMB: Chair Rob Pacheco, 1st Vice Chair Barry Taniguchi, Arthur Hoke, Ron Terry, Harry Yada

Kahu Kū Mauna: Hannah Kihalani Springer

OMKM: Arnold Hiura, Stephanie Nagata, Dawn Pamarang, Ululani Sherlock, and William Stormont

Others: Doug Arnott, Rohendra Atapattu, Gary Davis, Cory Harden, Herring Kalua, George Koenig, Ron Koehler, Robert McLaren, Tetsuo Nishimura, Antony Schinckel, Lew Schwenk, and Christian Veillet

I. CALL TO ORDER

Chair Rob Pacheco called the Mauna Kea Management Board (MKMB) meeting to order on July 24, 2006, at 10:05 a.m.

II. APPROVAL OF MINUTES

It was moved by Harry Yada and seconded by Arthur Hoke that the minutes of the October 3, 2005, meeting of the MKMB be accepted. The motion was carried unanimously.

III. DIRECTOR'S REPORT

A. Legislative Follow-Up

Statutory Authority to Promulgate Administrative Rules

This measure, which was deferred from the 2005 legislative session, did not get a hearing in 2006. The bill is dead. Chairperson of the House Higher Education Committee, Tommy Waters, revised the language of the bill shortly before the deadline for committee hearings. The revised bill contained language concerning development issues that UH was not comfortable with. OMKM will work with the general counsel's office to look at other options.

Senate Resolution 79

Senate Resolution 79 passed. It calls for the establishment of a special Senate committee to make recommendations on appropriate lease-rent for the Mauna Kea summit lands. Members of this special subcommittee include the chairpersons of the following Senate committees: Higher Education; Government Affairs and Transportation; and Water, Land and Agriculture Committee.

House Concurrent Resolution 314

House Concurrent Resolution 314 passed. It requests the Institute for Astronomy (IfA) to review and report on the long-term development of observatory sites on the summit of Mauna Kea. Dr. McLaren stated the report will include a summary of the scope of development described in the Master Plan, current thoughts on development, and a report on development over the past six years. The Master Plan was intended to be an outline of the full range of what might be proposed. It was never suggested, even then, that all the projects listed would materialize, though

there was some indication as to how much might be developed. The document will probably be developed sometime in October/November in its final form for the legislature. IfA will keep the Office informed. There was discussion about the future of the NASA/Keck project. NASA has not made an official announcement nor contacted OMKM. Further, the court has not yet issued a ruling on the law suit regarding the Board of Land and Natural Resources (BLNR) issuance of a Conservation District Use Permit (CDUP). The suit was filed over a year ago.

Ron Terry commented that permitting was one barrier preventing the project from proceeding, the other, and more important, is funding. He thought President Bush's NASA budget is unprecedented in its emphasis on manned space flight versus all other endeavors, but it may change after this election if congress becomes Democratic. Is it too early to say that the Keck Outriggers is dead? Dr. McLaren stated the current permit requires construction to begin by the end of October, two years after the permit was issued. At present there does not appear to be justification to ask for an extension. An extension would require approval by the land board chair before the end of the two years.

B. Smithsonian Submillimeter Array (SMA) Installation of an Emergency Phone

An SMA staff member, on his own volition, installed an emergency phone on the exterior of the building without prior consultation with the Office. When management at Smithsonian learned of this, they notified OMKM. The Office does not have a problem with the installation of the phone, but wanted to inform the Board.

C. NASA Infrared Telescope Facility

Exterior Painting

This past spring the NASA Infrared Telescope Facility (IRTF) requested approval to paint the exterior of their summit facility. This is a repair and maintenance project and the Office granted approval with conditions. The rangers regularly reported on the painting progress and indicated that the work went well. Mr. George Koenig stated that the job is completed except for some flashing details by the entrance that requires replacing.

Roofing Project

Late last year IRTF approached the Office requesting approval of a roofing project. This is a repair and maintenance function and OMKM granted approval with conditions. IRTF worked with the University's contracting office and did an excellent job of making sure conditions regarding contractor's work performance were included in the contract. The rangers reported regularly on the roofing progress and monitored compliance with conditions. This project is completed.

Board's and OMKM's Role in Approving Projects

There was discussion about the Board's and OMKM's roles in approving projects. Because the subleases are contracts are the Board and Office representing UH, the lessor, or are our actions covered under the Master Plan? Our roles are not clearly defined.

Director Stormont stated the subleases require facilities to keep their premises clean and free of debris and OMKM is responsible for overseeing compliance with those conditions. Therefore, the Office plays the role of the lessor with respect to these kinds of activities. We have been approving what are believed to be insignificant projects. OMKM's role as described in the Master Plan is clearer with respect to minor and major projects. He sees the Office as playing the role of the representative of the lessee. Mr. Yada commented the Office is a lessee with regard to the DLNR lease and a lessor with respect to the subleases.

Sequence of Events: What Agency is Approached First DLNR or OMKM?

Is the Office contacted before the project applicant seeks a conservation determination? Director Stormont explained typically they come to OMKM first. If our review indicates a potential DLNR permit, we advise the applicant.

Dr. Terry added we should also consider Chapter 343. Technically, a formal exception is required for everything, but in practice it is not generally done, but in a few years more formal procedures may be required.

D. Pan-STARRS Project

Pan-STARRS is being proposed as a possible replacement for the University's 2.2-meter telescope. The IfA's consultant is preparing a notice of intent to file an environmental impact statement (EIS). Some field work is currently being done. A prototype of the Pan-STARRS telescope was recently dedicated on Haleakala.

Dr. McLaren informed the group that IfA does not have a schedule for the project because the notice of intent is not ready yet nor do they have approval from the Air Force to publish it. There was one briefing session with Kahu Kū Mauna and nothing substantive has changed since then. He mentioned that an alternate site is Haleakala.

E. UHH 1-meter Telescope Project

The draft environmental assessment (EA) was published earlier this year and they are close to filing the final. The final EA will be attached to the conservation district use application to DLNR. A formal proposal has not been submitted to the office for the replacement of the 24 inch with the UH Hilo one meter. Dr. Heacox met with Director Stormont and Ed Stevens, representing Kahu Kū Mauna, at Hale Pohaku a couple of weeks ago to discuss the status of the project.

Discussion on this project raised the question again about sequencing and the Board's role. Should the project come to the Board before they pursue an EA or CDUP? Also what and when does the Board get involved? Director Stormont stated in the case of a major project, he would like to see that environmental compliance is met before a decision is made by the University such as the case with the Outriggers. The approval process can run concurrently. The first step involving the Board is the classification of the project, i.e. insignificant, minor or major.

Dr. Terry stated the CDUP process, in contrast to the EA, is specific about design, so the design component has to be completed when filing a CDUA. If the Board had any substantive changes to the design, the applicant would have to go back to DLNR and ask to have the changes incorporated. This could result in getting a whole new permit. Were comments made on the draft EA? Associate Director Nagata stated they were minor comments, such as a misquote taken from the NASA EIS and mislabeling UH's role in the permitting process. Kahu Kū Mauna had an opportunity to review the draft environmental assessment and offered their comments as well.

Mr. Yada stated it is understood that by coming to the Board first, information may not be complete in which case the Board may not be prepared to approve a project but at least be able to say it is ok to move forward and apply for a CDUP. He did not recall hearing anything about UHH coming to the Board before submitting its CDUA, but he would like to see their submittal and have this Board approve the step of moving forward to apply for the CDUA. Chair Pacheco stated this Board should be the initial gateway whereby it reviews projects to see if they comply with the Master Plan. The applicant then moves forward and starts the permitting process. If he was an applicant who wanted to develop a telescope, he would not want to go through the whole CDUA/CDUP process only to be turned down by this Board. The processes could be concurrent, but this Board and the Master Plan provides input ahead of time and if it says okay, then the project should go forward.

Mr. Yada suggested this sequencing issue should be taken up at another meeting. Staff should prepare a memo outlining the steps. This should be an action item for the Board to approve in principle the moving forward with the CDUA. Chair Pacheco added we need to formalize and clarify what those steps are. We can review the best information available then make a recommendation to continue or not.

Dr. Terry asked Director Stormont a hypothetical question: If someone from Gemini proposed to put a 15-story building up in their area, do they go forward, do their EIS, apply to get their CDUP and let us know what is happening, but OMKM and MKMB does not have much to do with it until all that process is over? Director Stormont reviewed the steps taken in the Outrigger project: 1) they did the environmental assessment; 2) they came to the Office; 3) the Board recommended a project classification based on the Master Plan; 4) a Project Review Committee was established and UH's review process ran concurrently with the DLNR process; and 5) the Board reviewed the results of the Project Review Committee. But the project has not come to the Office or the Board, which is required before it is processed through UH Hilo Chancellor, president and Regents. Dr. Terry asked if a project fits into the Master Plan, we allow it to proceed and initiate a design review process, but we do not say yes or no until the end? Director Stormont replied the projects that have come forward have been in keeping with what is called for in the guidelines of the Master Plan. Dr. Terry clarified, therefore, if someone submitted a project that was not in the Master Plan then we could say no.

Mr. Hoke asked if this Board is someplace on the path, or do we find out by reading in the newspaper that something is happening before coming to the Board as part of the initial process? He would be upset if he picked up the newspaper and saw that IfA or anybody else is trying to put the Next Generation Large Telescope (NGLT) up at the very top. Director Stormont explained when projects are proposed those who are proponents are made aware there is this process including OMKM, MKMB, and Kahū Ku Mauna Council.

Dr. Terry asked when is the determination made that a project is consistent with the Master Plan, and who makes that determination? Chair Pacheco interrupted saying this discussion is not on the agenda and felt the Board did not need to go further with this at this time, but should discuss it at a future meeting. Mr. Yada agreed and suggested staff prepare a draft. Mr. Hoke commented he was against putting off this discussion because this is his last meeting as a board member and wanted to be part of that discussion, but added he could do it at future meetings as member of the audience.

F. Survey Work on Mauna Kea

Pacific Consulting Services is currently on contract to survey the archeological sites of the Science Reserve. They have two surveys planned this year. Wekiu bug surveys continue.

G. Memorandum of Agreement between the University and DLNR

There has been recent movement calling for a memorandum of agreement between the University and DLNR regarding oversight of the summit lands. There is a strong desire to formalize the relationship between the Office, the University, and DLNR and its various line agencies to ensure everyone understands what the goals are and each agency's role. Director Stormont is developing a memorandum of agreement that defines areas of responsibility. He plans to have a draft available by August 1, 2006.

Chair Pacheco asked Director Stormont to distribute the draft once it is available.

H. Visitor Information Station (VIS) Renovations

Phase One of the VIS improvements is nearly complete. This phase involved primarily the interior rearrangement of the building. One of the last steps is the flooring. Many of the improvements were made in response to a survey of visitors to the VIS. Planning for Phase Two is under way.

IV. COMMITTEE REPORTS

A. Kahu Kū Mauna

Hannah Springer reported on behalf of Ed Stevens.

Kahu Kū Mauna Workshop – January 21, 2006

Kahu Kū Mauna held a workshop retreat on January 21, 2006. Two priority areas were identified: 1) revisions to the Council's guidelines; and 2) review of the Mauna Kea Master Plan. Subcommittees were established to do a chapter-by-chapter review of the Master Plan. The review included concerns and issues raised by the recent auditor's report particularly the lack of clarity and certainty in the process, a topic board members just spent a fair amount of time discussing. The Council looks forward to seeing and being a part of that discussion at future meetings. The Council has some questions that we referred to Associate Director Nagata. One in particular is which management plan is all of this activity occurring under? The 1995 or the 2000 Master Plan? This is another issue raised by the auditor. We continue the chapter-by-chapter review of the Master Plan.

Next Meeting with Lisa Hadway, Natural Area Reserve

We intend to meet with Lisa Hadway of the Natural Area Reserve at the next meeting regarding how we can work together. We understand the jurisdictional issues among the different agencies. In particular, Kahu Kū Mauna has received requests about the removal or harvest of resources within the Natural Area Reserve.

Action Items on the Agenda

With regard to the action items today, we will just follow the agenda and make comments on them as they arise.

V. NEW BUSINESS

(Associate Director Nagata requested that NASA's Infrared Telescope proposal be moved to the top.)

A. NASA Infrared Telescope (IRTF) Request to Install Temperature and Humidity Sensors

See Attachment 1 for a summary of the project.

OMKM recommends classifying this project **Minimal Impact** and allowing IRTF to proceed. OMKM's recommendation is based on the following:

- The proposed installations will not significantly alter the exterior appearance or structure of the existing facility.
- The impact to the immediate surroundings and summit region is minor.

Discussion

Ms. Springer stated the Kahu Kū Mauna Facilities Subcommittee met on the matter and Kahu Kū Mauna concurs with staff report that there is minimal impact. Kahu Kū Mauna has no further recommendations.

Action

It was moved by Harry Yada and seconded by Arthur Hoke to accept OMKM's recommendation that this project be: 1) classified minimal impact; and 2) approved with conditions. The motion was carried unanimously.

B. Smithsonian Submillimeter Array (SMA) Request to Install: 1) Fire Escape Stairway; 2) Additional Air Conditioning Unit; and 3) Safety Vestibule

See Attachment 2 for a summary of the project.

OMKM recommends classifying this project **Minimal Impact** and allowing SMA to proceed. OMKM's recommendation is based on the following:

- The proposed installations will not significantly alter the exterior appearance or structure of the existing facility.
- The impact to the immediate surroundings and summit region is minor.

Discussion

Mr. Hoke asked if there was going to be a concrete pad at the bottom of the stairs. Mr. Antony Schinckel, SMA Director of Operations, clarified that the base of the stairwell will be a 3-foot by 4-foot concrete pad onto which the stairs will exit. The top part of the stairs will be supported by posts placed on individual concrete pads, which will be about 18 inches by 18 inches.

Mr. Yada asked if the safety vestibule is going to be installed onto an existing slab or if they were going to put in a new slab. Mr. Schinckel stated it is an existing slab and the horizontal door is built into the slab. Director Stormont included that the depth of the vestibule is the same as the existing slab.

Ms. Springer indicated that Kahu Kū Mauna concurs with staff's recommendation that this will have a minimal impact.

Action

It was moved by Barry Taniguchi and seconded by Arthur Hoke to accept OMKM's recommendation that these projects be: 1) classified minimal impact; and 2) approved with conditions and that the safety vestibule work be subject to a site plan approval. The motion was carried unanimously.

C. Institute for Astronomy (IfA) Request to Temporarily Install Site Testing Equipment on the Coude Roof

See Attachment 3 for a summary of the project.

OMKM recommends classifying this project **Minimal Impact** and allowing IfA to proceed. OMKM's recommendation is based on the following:

- The proposed installations will not significantly alter the exterior appearance or structure of the existing facility.
- The impact to the immediate surroundings and summit region is minor.

Discussion

Dr. McLaren clarified that the IfA received a site plan approval from DLNR.

Ms. Springer stated Kahu Kū Mauna had an opportunity to review and discuss this and concurs with staff's report.

Action

It was moved by Harry Yada and seconded by Arthur Hoke to accept OMKM's recommendation that this project be: 1) classified minimal impact; and 2) approved with conditions. The motion was carried unanimously.

D. Canada-France-Hawaii Telescope (CFHT) Request to: 1) Restore Grounding Wire Grid; 2) Restore and Prevent Further Erosion to Underground Structures and Facilities; and 3) Install a Metal Post Protective Barricade

See Attachment 4 for a summary of the project.

Grounding Wire Grid

OMKM recommends classifying this activity a **Minor Project** and that it be approved based on the results of the Minor Project Review process performed by OMKM. OMKM's recommendation is based on the following:

- Although the proposed installations will not significantly alter the exterior appearance or structure of existing facilities this project involves excavation and the addition of a permanent underground structure.
- All ground disturbances will be limited to the roadbed and the impact to the immediate surroundings is relatively minor.
- The proposed activity is necessary to ensure the safety of those visiting or working on the mountain and to prevent damage to equipment and structure.
- DLNR reviewed the proposal and deems the proposed work is minor in scope and consistent with the terms and conditions of CFHT's CDUP HA-527.

Soil Erosion Restoration and Metal Post Barricade

OMKM recommends classifying these activities **Minimal Impact** and allowing CFHT to proceed. OMKM's recommendation is based on the following:

- The proposed installations will not significantly alter the exterior appearance or structure of the existing facility.
- All ground disturbances will be limited to the roadbed and the impact to the immediate surroundings is relatively minor.

Discussion

Dr. Terry asked what the length of trench around the building was. Rohendra Atapattu said he was not sure, but would guess about 200 feet. Dr. Terry asked whether the area previously trenched was formerly disturbed on the surface. Associate Director Nagata confirmed that it was.

Drawings indicate the original cables were buried in a 3-foot trench around the roadway. Mr. Atapattu was not sure how deep the cable was buried on the eastern slope. It cannot be confirmed now that the cable is exposed. Digging will be to a depth of two-and-a-half feet which could mean it will be below previously disturbed ground. He emphasized that all the grading will be on roadway.

Dr. Terry asked the location of the concrete batching plant. Associate Director Nagata explained it is in an area just below the Caltech Submillimeter Observatory (CSO). It contains cinder that was taken off the summit. That site has been used over and over again for this type of work.

Ms. Springer stated Kahu Kū Mauna agrees that the work is needed to protect the integrity of the grounding grid for lightning protection. Ms. Springer called attention to Condition 5 and stated Kahu Kū Mauna requests that a cultural monitor be present. In the absence of a cultural monitor, the membership stands ready to go onsite and observe the work being done. She continued saying Kahu Kū Mauna would like to work with the Office to generate a list of individuals that can perform the cultural monitor work. But until such time, the membership of Kahu Kū Mauna stands ready to perform that service. Kahu Kū Mauna is looking at Ed Stevens or Reynolds Kamakawiwoole to do that work.

Director Stormont asked if it was Kahu Kū Mauna's desire to have that person there only during excavation or for other activities? Ms. Springer responded that the work should be monitored and Kahu Kū Mauna consulted at the time that the work begins.

Action

It was moved by Ron Terry and seconded by Arthur Hoke to accept OMKM's recommendation that the: 1) grounding wire grid be classified a minor project and recommend to the UH President to grant approval of this project; and 2) erosion restoration and installation of metal post barricades be classified minimal impact and approved with conditions. The motion was carried unanimously.

E. Canada-France-Hawaii Telescope Request to Install: 1) A Permanent Underground Conduit between its Observatory Building and Weather Tower; and 2) A Temporary Above Ground Conduit between the Weather Tower and Gemini Observatory Building.

See Attachment 5 for a summary of the project.

OMKM recommends classifying this activity a **Minor Project** and that it be approved based on the results of the Minor Project Review process performed by OMKM.

Recommendation is based on the following:

- Although the proposed installations will not significantly alter the exterior appearance or structure of existing facilities, this project involves excavation and the addition of a permanent underground structure.
- All ground disturbances will be limited to the roadbed and the impact to the immediate surroundings is relatively minor.
- The above ground conduit will be a temporary structure and will not be in place for more than 3 years. Activity required to install this portion of the conduit does not require the addition of any permanent infrastructure. All hardware associated with this portion of the conduit will be removed at the termination of the project.
- The proposed installations will not significantly alter the exterior appearance or structure of the existing facility
- DLNR reviewed the proposal and deems the proposed work is minor in scope and consistent with the terms and conditions of CFHT's CDUP HA-527.

Discussion

Ms. Springer called attention to Condition 5 requiring a cultural monitor . As in the previous agenda item, Kahu Kū Mauna recommends a cultural monitor be present during excavation. In the absence of a cultural monitor, as an interim measure, the membership of Kahu Kū Mauna is ready to perform that function.

Mr. Yada asked if the proposed trench for the underground portion of the conduit is the same trench CFHT will be digging as part of the grounding wire grid. Associate Director Nagata replied it is a different trench. Chair Pacheco asked what the cable on the ground would actually look like. Dr. Veillet stated the temporary pipe between the two telescopes will be painted the color of the soil to blend in. The pipe itself will be around 10 or 12 inches in diameter.

Action

It was moved by Barry Taniguchi and seconded by Harry Yada to accept OMKM's recommendation that this project be 1) classified minor project; and 2) recommend to the UH President to grant approval of this project. The motion was carried unanimously.

F. Commercial Tours

See Attachments 6 for a summary of recommended changes.

Discussion

Associate Director Nagata stated the Office is asking the Board to recommend approval of the proposed changes and taking the changes to the September meeting of the Board of Regents.

Dr. Terry asked if there was coordination with the permit holders regarding these changes. Associate Director Nagata replied the Office met with commercial tour operators in June to get their feedback about making changes to the permits and explained the reasons for the changes. They did not appear to be opposed to making changes, including the raising of fees. The operators were sent copies of the draft and given the opportunity to send in comments to OMKM by July 10th. We received no comments.

Mr. Hoke asked if consideration was given for periodic reviews of the fees and whether there are any provisions for enforcement against non-permit holders. Associate Director Nagata explained the permits are temporary and expire December 2007. The permits also contain language reserving OMKM's right to change the fees. The permits do not include enforcement for non-permit holders. Chair Pacheco stated administrative rules or management of the mountain would cover that, not the permit, but as other board members stated we have tried but not been successful in getting rules. Chair Pacheco and Doug Arnott stated the occurrence of non-permitted operators seems to have decreased with the ranger program.

Director Stormont stated that rangers report when they encounter non-permitted operators and whenever possible obtain contact information. Correspondence is sent from the Office. Non-permitted operators are cautioned that operating without a permit could jeopardize the possibility of a future permit. This seems to help the situation. Non-permitted operators cannot be cited by the Department of Conservation and Resources Environment Division (DOCARE).

Doug Arnott stated he has advocated for higher fees and the new assessment is a good thing. However, he felt that he could on behalf of all of the other operators, with the exception of Chair Pacheco, state that these increased fees result in increased responsibilities with this Board. He felt commercial operators should be represented on the Board which would facilitate communication with the other operators. Operators pay a fee to operate on the mountain, but they have no representation. This is akin to taxation without representation.

Mr. Arnott also felt there were aspects of this new permit which are inimical to the operators such as the right to terminate a permit for any reason. Chair Pacheco commented our current permits state a permit can be revoked within 30 days. It is a condition of every State permit. No permit guarantees the right to operate commercially on the mountain. It is assumed you could take the University to court if you felt that the determination was unfair. Mr. Yada confirmed that all the commercial operator permits contain the termination clause.

Chair Pacheco stated that having the permits transferred to the Office of Mauna Kea Management provides for a more flexible bureaucracy and a place take issues to. He emphasized these permits are temporary thus giving us an opportunity to see how they work or make recommendations before they are made permanent. Mr. Yada and Chair Pacheco agreed that up to now it has been difficult because the permits have been under DLNR, but the active management has been primarily by UH. Once UH establishes the permits the relationship and opportunity for input will be better. Operators had no interaction with DLNR on the mountain.

Mr. Yada was not sure if it would be appropriate to designate a representative of commercial operators on the Board. Chair Pacheco stated he represents the business community and not specifically the commercial operators. Mr. Hoke stated that when there was an association of commercial operators it might have been possible to have a representative on the Board, but the requirement for an association is being eliminated from the new permits so there is no one who can represent them. Therefore, if a commercial operator were to sit on the Board that person would only be representing that company and may not necessarily represent the group. He felt that a representative from the business community on the board, or participation as a member on a committee is a vehicle they can use to give input.

Dr. Terry commented to Mr. Arnott that being on the board might not be in his best interest. If you are advocating for your own economic interests and you are on this Board, you have to recuse yourself from practically everything. Dr. Terry could not advance anything that would remotely help his own pocketbook. He thinks Mr. Arnott would find himself in a difficult ethical position here, whereas where he is right now, he is not. Mr. Arnott disagreed with Dr. Terry. He believed he is capable deciding on what matters he could or could not vote on. He can still represent from the public position and he will continue to attend meetings. He suggested there be some kind of hearing process.

Mr. Yada commented that even though Mr. Pacheco is a commercial operator no member of the Board represents a special interest. It was suggested that commercial operators participate on one of the subcommittees. For example, the Public Safety and Conduct Committee. Mr. Arnott indicated he could speak on behalf of almost all the operators that participating on one of the committees would be welcome and asked which committee. Chair Pacheco explained that the Board does not approve committee members and suggested that Mr. Arnott talk with Mr. Yada or Associate Director Nagata. Dr. Terry felt he should be assigned to an active committee not an inactive one. Chair Pacheco stated the problem with the Public Safety and Conduct Committee is that we have no authority to promulgate rules. Mr. Yada added that has been the holdup on any action because we were not sure whether we could develop rules.

Mr. Yada commented, as the chair of that committee, he would take it under advisement and talk with Associate Director Nagata. In terms of representing the commercial operators, Mr. Hoke has a good point. Do we give them representation on the committee by a person that is selected by all of the operators or anybody who wants to? That is another issue - how that representation is handled on a committee. Mr. Arnott stated he has attended just about every meeting. All of the other eight permitted commercial tour operators are on the west side. He felt he could garner support for him to be their representative.

Dr. Terry, Mr. Taniguchi, and Chair Pacheco assured Mr. Arnott that the commercial operators had sufficient representation and input. Mr. Arnott replied he would accept that.

Before the Board entertained a motion to vote, Ms. Springer stated that Kahu Kū Mauna had the opportunity to review the documentation and concurs with staff recommendations.

Mr. Taniguchi presided over the meeting for Chair Pacheco who recused himself. Mr. Taniguchi asked if there were any other comments or questions. He noted there were four voting members present which constituted a majority.

Action

It was moved by Arthur Hoke and seconded by Harry Yada that the recommendation of staff be implemented as described in the report and forwarded with a favorable recommendation to the Board of Regents for adoption. The vote was unanimous with the four voting members.

G. Kahu Kū Mauna Nominees

Discussion

Ms. Springer asked if the Board would like to take this up as a slate. Chair Pacheco stated a slate would be fine.

First is the matter of Ms. Ululani Sherlock's term, which ends on June 30, 2009. Ms. Sherlock left Kahu Kū Mauna when she was employed by the OMKM. Kahu Kū Mauna recommends Ms. Leilehua Ruth Omphroy to fill the remainder of Ms. Sherlock's term. The terms of two other members expired on June 30, 2006. They are Ms. Niniau Kawaihae-Simmons and Ms. Mikahala Roy. Kahu Kū Mauna recommends Mr. Chad Kalepa Baybayan and Mr. Sean P. Naleimaile to fill those two seats.

Action

It was moved by Mr. Taniguchi and seconded by Mr. Hoke that the nominees be approved. The motion was carried unanimously.

H. Amend the Approval Process for Minimal Impact Projects

Associate Director Nagata informed the Board that the Office would like to review and revise the project approval process for Minimal Impact projects. Over the past five years of handling projects OMKM feels there are a number of projects that may not necessarily require Board action. Such projects include the installation of cameras or temperature sensors. OMKM would continue to ask Kahu Kū Mauna for its input on projects including those believed to have a minimal impact. OMKM would like to submit a proposal on this matter to the Board for its consideration in the future. We would also like to address the matter of the sequencing of review by DLNR and UH. The Office would like some feedback as to whether this is a matter the Board would like to pursue.

Mr. Yada stated this is a good idea, but there should be specific criteria and more detail concerning the types of projects.

Chair Pacheco was curious about how projects were handled before there was an OMKM. For example, if Smithsonian was going to put up an emergency phone on the outside what would IfA have done? Could Smithsonian install the phone without requesting approval? Dr. McLaren explained generally the IfA would have checked with DLNR if a site plan approval was necessary. Site plan approvals were created in regulations adopted about ten years ago. DLNR would determine whether the proposed activity was considered part of an existing permit, if it wasn't they would say no, or they would require a site plan approval. Chair Pacheco asked if there was anything on the agenda today where an observatory would have gone ahead and just done it. Dr. McLaren stated the only item might be the temperature and humidity sensors.

Chair Pacheco stated this could be folded into a future discussion. Dr. Terry recalled talking about a retreat at last October's Board meeting where this would be one of the topics. If the Board was to hold a retreat is it subject to Sunshine? Chair Pacheco was not sure. This issue is also one of Kahu Kū Mauna's priorities. It would be good to have Kahu Kū Mauna, IfA and maybe the University legal counsel present.

Action

Mr. Taniguchi asked the Director to arrange something and moved on the motion. Dr. Terry seconded. The motion was carried unanimously.

Discussion

Ms. Springer asked if she could recommend some topic areas in addition to those that have been discussed. One is clarification on the 1995 Management Plan, if that indeed is still in force. With regard to the 2000 Master Plan, it contains a section called the Management Plan, but it reads more like a guide. So getting back to certainty and clarity is a primary concern. She suggested a well-constructed definitions section as part of the process.

Chair Pacheco stated this is something the Board is interested in and has been dealing with from day one. Mr. Taniguchi stated if you look at the Master Plan, it is very vague so we would have a lot to go through in developing the process. Having five years of experience will help define the process. Ms. Springer agreed with Mr. Taniguchi and suggested regular periodic reviews of the document. If there are no amendments to be made a statement that says on this date the documents were reviewed and no changes were recommended. If we build periodic reviews into the process and adhere to them, we may be subject to less public scrutiny and criticism.

Chair Pacheco asked Director Stormont to look into this formal request.

VI. ANNOUNCEMENTS

A. Newly Appointed Mauna Kea Management Board Members

Director Stormont announced the expiration of terms for two board members, Arthur Hoke and Jim Kennedy. Director Stormont thanked Mr. Hoke for his participation.

At last week's Board of Regents meeting, two new members were approved. They are Mr. Antony Schinckel and Mr. Herring Kalua. They join the Mauna Kea Management Board effective August 1, 2006.

Director Stormont asked Mr. Hoke if he would join us at the next meeting as we would like to do a more formal aloha to him and Dr. Kennedy. Director Stormont added he welcomes his presence and input at future meetings.

B. Regular Scheduled Meetings

It has been some time since the Board met and Director Stormont proposed meeting on a regular basis, regardless of whether there are action items or not, six times on the odd months of the year: Chair Pacheco agreed it would be good to have meetings regardless and provide an opportunity for public input.

Director Stormont stated he will work on scheduling meetings on a regular basis and try to hold to that schedule. Dr. Terry asked for the Board's consideration in having a regular day, for example, the second Tuesday or fourth Wednesday. Director Stormont explained in the past we have tried to set a regular schedule, but there were times when we could not because we did not have quorum or because of board members' schedules.

C. Election of New Board Chair

An agenda item at the next Board meeting will be election of a new Chair.

D. Other Matters

Ms. Harden commented she is glad to hear of plans to look over the Master Plan periodically and hopes the Board will consider having community input in some form.

Mr. Taniguchi suggested if anyone has topics to put it out now. Not necessarily for discussion, but if we know what concerns you, we can look into it. Dr. Terry added they could make a list and pass it on to the Office.

Mr. Arnott added he thought it is excellent to have a meeting every two months. He thought it denigrates the importance of Mauna Kea to have it go by as long as it did.

VII. ADJOURNMENT

There being no further business, Chair Pacheco adjourned the regular meeting at 11:59 a.m.

Respectfully submitted:

Signed by Barry K. Taniguchi
Barry Taniguchi, First Vice Chair, MKMB

9/11/06
Date

NASA INFRARED TELESCOPE FACILITY

INSTALLATION OF TEMPERATURE AND HUMIDITY SENSORS

Purpose	To collect data to improve dew point monitoring for closing the shutter when weather conditions suddenly change.
Equipment and Structures to be Installed	<ul style="list-style-type: none"> ▪ Temperature and humidity sensors.
Location of the Installation	The equipment will be installed on the west side of the control building.
Construction Activity	<ul style="list-style-type: none"> ▪ No ground disturbance. ▪ Sensors to be mounted on each end of a horizontal bar of a pre-painted white T-pole. ▪ T-pole is 5' tall with a 3' wide horizontal bar. ▪ T-pole will be mounted through the wall onto a post located inside the building. ▪ It will take 2 – 3 days to install using IRTF personnel.
Mitigation	<ul style="list-style-type: none"> ▪ Any generated debris will be contained and properly disposed of.
Permit Requirement	<p>No permit required.</p> <p>Pursuant to Hawai'i Administrative Rules HAR §13-5-22 “construction or placement of structures accessory to existing facilities as identified in the exempt classes established in §11-200-8” do not require a permit from DLNR. The “construction or placement of minor structures accessory to existing facilities” is an exempt activity under HAR §11-200-8.</p>
Conditions	<ol style="list-style-type: none"> 1. Notify OMKM when it will commence summit construction activities. 2. Adhere to the mitigation measures described in its proposal. 3. Allow OMKM rangers to visit and monitor construction activities. 4. Notify OMKM upon completion of the project.

Attachment 2
SMITHSONIAN SUBMILLIMETER ARRAY (SMA)

INSTALLATION OF A FIRE ESCAPE LADDER, AIR CONDITIONER & SAFETY VESTIBULE

	Fire Escape Stairway	Air Conditioning Unit	Safety Vestibule
Background	<p>Currently there is no external fire escape from the 2nd floor of the control building to the ground.</p> <p>There is only one stairway to the 2nd floor which is located inside the building.</p>	<p>The amount of equipment in the control and computer rooms has increased maximizing the output of existing air conditioner.</p> <p>Currently there is no backup air conditioning system for the computer room.</p>	<p>The existing doorway to the stairway that leads to the basement of the control building is a horizontal hatch situated outside on the ground and adjacent to the west wall of the control building.</p> <p>During winter substantial amounts of snow and ice build up on the hatch making it difficult to open.</p> <p>The hatch lies directly below the edge of the roof and those accessing the basement through the hatch during winter are in danger of being injured from falling ice and snow.</p> <p>Access to the basement is necessary to perform maintenance on the patch-panels where the fibers from all the pads terminate.</p>
Purpose	<p>To provide a safe means for exiting the 2nd floor in the event of a fire.</p>	<p>To provide: 1) optimal temperatures necessary to maintain the sensitive equipment in the control and computer network rooms; and 2) backup for the computer room air conditioning system.</p>	<p>To provide during the winter months: a) a safety measure to prevent injury to those accessing the basement through the ground-based hatch; and b) for easier access to the basement.</p>

Attachment 2
Smithsonian Fire Escape Ladder, Air Conditioner and Safety Vestibule, cont'd

	Fire Escape Stairway	Air Conditioning Unit	Safety Vestibule
Description of Projects	<p>The stairway will be situated on the south facing wall of the control building.</p> <p>One of the existing windows will be replaced with a doorway providing access to the stairway.</p> <p>It will be an “open” steel staircase designed and painted to match the color of the building.</p>	<p>The additional air conditioning unit will be placed on the west side of the control building.</p> <p>It will be placed on the existing concrete pad.</p> <p>The unit is designed as an “ultra quiet” machine generating little additional noise.</p> <p>If the vestibule is built the unit will be enclosed within the vestibule.</p>	<p>The vestibule will be installed on the west facing wall of the control building.</p> <p>Dimensions are: 17.3’ long x 5’ deep with a slanted roof rising from 9.3’ to 14.2’.</p> <p>Doors will be placed on the south and north walls of the vestibule.</p> <p>Construction materials will be similar to those used to build the control building.</p> <p>It will be painted to match the color of control building.</p>

	Fire Escape Stairway and Air Conditioning Unit	Safety Vestibule
Permit Requirements	<p>NO PERMIT REQUIRED</p> <p>Pursuant to Hawai‘i Administrative Rules HAR §13-5-22 “construction or placement of structures accessory to existing facilities as identified in the exempt classes established in §11-200-8” do not require a permit from DLNR. The “construction or placement of minor structures accessory to existing facilities” is an exempt activity under HAR §11-200-8.</p>	<p>SITE PLAN APPROVAL</p> <p>The construction of the vestibule, although deemed an exempt activity under HAR §11-200-8, may require a Site Plan Approval from DLNR. Based on recent discussions with DLNR, a rule of thumb guideline is if the accessory structure is a substantive structural alteration of or addition to the facilities then HAR §13-5-23 may apply. The latter requires a Site Plan Approval.</p> <p>This activity may not be regarded as a substantive change to an existing building, but as a precaution, OMKM recommended SMA apply for a Site Plan Approval.</p>
Conditions	<ol style="list-style-type: none"> 1. Notify OMKM when it will commence summit construction activities. 2. Adhere to the mitigation measures described in its proposal. 3. Allow OMKM rangers to visit and monitor construction activities. 4. Notify OMKM upon completion of the project. 	<ol style="list-style-type: none"> 1. Notify OMKM of receipt of a Site Plan Approval from DLNR. 2-5. Conditions 1-4 for the Fire Escape Stairway and Air Conditioning Unit.

Attachment 3
IfA 2.2 METER TELESCOPE

TEMPORARY INSTALLATION OF SITE TESTING EQUIPMENT

Purpose	To collect data to: 1) help characterize the nature and location of the optical turbulence above the summit; 2) measure the astronomical image quality achievable at Mauna Kea; and 3) gain a better understanding of how atmospheric conditions affect image quality.
Equipment and Structures to be Installed	<p><u>Equipment</u> A 16” Meade telescope with an attached site-testing instrument, and two computers.</p> <p><u>Enclosures:</u></p> <ul style="list-style-type: none"> ▪ Two protective weather enclosures (one for the computers and one for the telescope). ▪ To be made of wood with fiber glass coating and painted white to match the color of the existing building. ▪ Dimensions: <ul style="list-style-type: none"> ▪ Computer enclosure: 1' H x 3'W x 6' L ▪ Telescope enclosure: 6' H x 3'W x 3' L <p><u>Walkway and Safety Railing</u></p> <ul style="list-style-type: none"> ▪ Surrounding the enclosures will be a 10' x 10' work area and will include a safety railing and a metal grating walkway. ▪ The safety railing will be waist high and supported by a system of posts with 8' high corner posts. Guy wires will support the corner posts. <p><u>Windscreens</u></p> <ul style="list-style-type: none"> ▪ Windscreens made of construction webbing will be held in place by the corner posts. They will be deployed at night and only if needed.
Location of the Installation	The equipment will be installed on the roof of the coude room.
Construction Activity	<ul style="list-style-type: none"> ▪ No ground disturbance. ▪ The telescope will be mounted on a pier. ▪ Telescope pier and enclosures will be attached to the roof with bolts. Existing foam over coating in five locations will need to be removed to allow for the drilling of mounting holes for the bolts and the installation of a metal mounting stand. Foam over coating will be replaced. ▪ The telescope pier and enclosures will be attached to their respective mounting stands. ▪ The walkway, safety railing and posts will be attached to an existing metal grating. ▪ Common hand and power tools will be used. ▪ Installation will take approximately 2 days.
Operations	<ul style="list-style-type: none"> ▪ The telescope will be operated about 40-50 hours per week for about 1 year. ▪ The equipment will be used during the period from about sunset to sunrise. A technician will make periodic visits during this period to check on the equipment.
Mitigation	<ul style="list-style-type: none"> ▪ All construction activities will be kept to a minimum and limited to the coude roof and cat walk/ladder to the site. ▪ Care will be taken to ensure that no foam or other debris escapes from the construction work area, especially during high wind conditions. ▪ There are no radio frequency emissions from the instruments. ▪ All equipment will be removed after 12 months of operation.
Permit Requirements	<p>Pursuant to Hawai‘i Administrative Rules HAR §13-5-22 “construction or placement of structures accessory to existing facilities as identified in the exempt classes established in §11-200-8” do not require a permit from DLNR. The “construction or placement of minor structures accessory to existing facilities” is an exempt activity under HAR §11-200-8.</p> <p>Although this project is deemed to fall within the exempt classes of action under §11-200-8, as a precaution, IfA requested a Site Plan Approval (SPA) from DLNR. DLNR granted a SPA (HA-06-46) on June 20, 2006.</p>

Attachment 4
CANADA FRANCE HAWAII TELESCOPE (CFHT)

GROUNDING WIRE GRID, SOIL EROSION RESTORATION AND METAL POST PROTECTIVE BARRIER

	Grounding Wire Grid	Soil Erosion Restoration	Metal Post Protective Barricade
Background	<ul style="list-style-type: none"> ▪ The grid is an electrical grounding system that provides protection from lightning strikes. ▪ Wind, vehicular traffic and snow removal activities have contributed to soil erosion on the CFHT site. ▪ Erosion has uncovered copper cables in the roadway and along the eastern slope. ▪ Testing by a consultant confirmed the grounding grid is discontinuous and warned that according to the National Electrical Code the grounding cable must be buried a minimum of 2.5'. ▪ The exposed cables pose a potential safety hazard to visitors and staff, especially in the event of a lightning strike. ▪ Erosion of the eastern slope has exposed a concrete junction box and foundation. 	<ul style="list-style-type: none"> ▪ Vehicular traffic has contributed significantly to the erosion of the roadbed around the building. ▪ Erosion has exposed the ground level access headers for the underground potable water (east) and diesel fuel oil storage tanks (west). The headers are somewhat protected by vertical steel posts. ▪ Located near the diesel headers are 7 cathodic protection anodes which is currently only 1 foot below the surface. ▪ Erosion of the road surface southwest of the observatory has exposed the edges of concrete slabs used to mount ground-level access covers for the septic system. The covers are not protected by steel posts. ▪ The headers, septic access covers and cathodic protection anodes are at risk from damage from the use of vehicles, heavy equipment and snow removal machinery. 	<ul style="list-style-type: none"> ▪ Located on the southern portion of the CFHT site are: <ul style="list-style-type: none"> – HELCO boxes; – Weather tower; – Communications man and hand-holes; and – Concrete surveyor's altitude marker. ▪ Erosion is not extensive, but these are not protected by boundary posts. ▪ A safety hazard exists, particularly in the event a vehicle or snow removal equipment hits the electrical transformer box. This poses a greater problem when the area is covered with snow and the location of these boxes is not readily visible.
Purpose	<ol style="list-style-type: none"> 1. Restore the grounding system and bring it up to code; 2. Eliminate a safety hazard; and 3. Remove unsightly structures. 	Restore the eroded areas and prevent potential damage to the water and diesel ground headers, septic system covers and cathodic protection anodes.	To provide a safety barrier and prevent accidental damage to the described structures.
Construction Activities	<ul style="list-style-type: none"> ▪ Remove the concrete junction box and foundation. ▪ Reopen the existing trench around the base of the building remove cable and dig to a depth of 2.5' to meet national electrical code. Replace cable. ▪ Excavate the roadway where the grounding cable is broken or suspected to be broken. Repair some of the damaged cable or cut cable to ground level and remove. ▪ Exposed cable on the eastern slope will be cut and removed. No excavation will take place on the slope. ▪ Add a new circuit under the existing roadway to replace the dysfunctional existing outer ring. Dig a circular trench using a 	<p><u>Eroded Areas</u></p> <ul style="list-style-type: none"> ▪ Cinder stored at the summit batch plant will be used to refill the eroded areas. ▪ Approximately 390 cubic yards of cinder will be needed. <p><u>Erosion Prevention</u></p> <ul style="list-style-type: none"> ▪ Installing barriers across the roadway on the NE and NW sides of the building. Each barrier will consist of two metal posts and a chain. ▪ To prevent further roadbed erosion due to 	<ul style="list-style-type: none"> ▪ Add about 6 steel boundary posts around the described structures. ▪ Holes will be dug using a powered post hole digger. ▪ Size of the holes will be 18" by 48" deep. ▪ Steel posts are 4" diameter ▪ Posts will be stabilized using concrete fill. ▪ Repair or remove and replace

Attachment 4
Grounding Wire Grid, Soil Erosion Restoration and Metal Post Protective Barricade

	Grounding Wire Grid	Soil Erosion Restoration	Metal Post Protective Barricade
Construction Activities cont'd	<p>backhoe or similarly sized excavator on the roadway a minimum of 6 feet from the current edge of the graded plateau. Trench will be 2.5' deep to meet national electrical code. Lay copper cable in the trench and refill the trench using same excavated material.</p> <ul style="list-style-type: none"> ▪ To avoid unnecessary disturbance to the landscape, the original outer circuit will remain in place except for the removal of exposed damaged cables. ▪ If additional cinder is needed to refill the trenches, cinder from the stockpile in the summit batch plant will be used. 	<p>vehicular traffic by repairing or replacing posts located around the water and diesel ground level headers that are leaning. May require some digging to reinstall the posts to an upright position.</p> <ul style="list-style-type: none"> ▪ Add additional posts to protect the area around the diesel tank and buried cathodic protection system. <p>MKSS will be asked to perform the needed services.</p>	<p>existing posts.</p>
Mitigation Measures	<ul style="list-style-type: none"> ▪ Excavation will be limited to the roadway. ▪ No excavation will take place on the slope. ▪ A water truck will be on hand to spray water to control dust. 	<ul style="list-style-type: none"> ▪ HELCO, Hawaiian Telcom, and IfA will be informed in advance of the work. ▪ Temporary markers will be installed at locations for the new posts and prior approval from the above mentioned organizations will be obtained prior to digging. ▪ All materials and equipment will be secured in the event of high winds. ▪ All trash and debris will be removed and disposed of appropriately and promptly. 	
Permit Requirements	<p>NO PERMIT REQUIRED</p> <p>Pursuant to Hawai'i Administrative Rules HAR §13-5-22 "<u>replacement or reconstruction of existing structures and facilities</u> as identified in the exempt classes established in §11-200-8...where the new structure will be located approximately on the same site and will have density, height, and dimensions as the structure replaced" do not require a permit from DLNR.</p> <p>Exempt activities under HAR §11-200-8:</p> <ul style="list-style-type: none"> ▪ "Operation, repair or maintenance of existing structures, facilities, equipment or topographical features, involving negligible or no expansion or change or use beyond that previously existing." ▪ "Replacement or reconstruction of existing structures and facilities where the new structure will be located generally on the same site and will have substantially the same purpose, capacity, density, height and dimensions as the structure replaced." ▪ "Construction or placement of minor structures accessory to existing facilities". <p>DLNR REVIEW – APPROVAL GRANTED</p> <p>DLNR reviewed this proposal and granted approval on December 5, 2005. DLNR deemed this project to be minor in scope and is consistent with the terms and conditions of CFHT's Conservation District Use Permit, HA-527.</p>		

Attachment 4
Grounding Wire Grid, Soil Erosion Restoration and Metal Post Protective Barricade

Grounding Wire Grid, Soil Erosion Restoration and Metal Post Protective Barricade	
OMKM Recommended Conditions	<ol style="list-style-type: none"> 1. Notify OMKM when it will commence summit construction activities. 2. Adhere to the mitigation measures described in its proposal. 3. Keep walking and hiking on the eastern slope to a minimum. Access the slope only at the points where the cables will be cut and where the concrete junction box and foundation will be broken apart and removed. 4. Allow OMKM rangers to visit and monitor construction activities. 5. OMKM and MKMB recognize that ground disturbance adds to the cumulative impact on the spiritual and sacredness of Mauna Kea. In the absence of a plan for on site monitoring by a cultural monitor, as an interim measure a member of Kahu Kū Mauna must be notified and be on site during excavation operations and other activities identified by Kahu Kū Mauna that require monitoring oversight. 6. Notify OMKM upon completion of the project.

Attachment 5

CANADA FRANCE HAWAII TELESCOPE (CFHT)

TEMPORARY INSTALLATION OF A CONDUIT BETWEEN THE CFHT AND GEMINI FACILITIES

	Permanent Installation of an Underground Conduit between CFHT Observatory and Weather Tower	Temporary Installation of an above Conduit between the Weather Tower and Gemini Observatory
Background	<ul style="list-style-type: none"> ▪ The OHANA project (Optical Hawaiian Array for Nanoradian Astronomy) is an exploratory endeavor involving the connection of the Mauna Kea telescopes in an astronomical optical interferometry. ▪ The goal is to extend the scientific capabilities of the entire summit of Mauna Kea by using existing facilities in a new and collaborative way. ▪ CFHT and Gemini are working together to test the technology behind this endeavor. ▪ A fiber optic cable between CFHT and Gemini is required to test this program. Currently no suitable underground conduit exists between CFHT and Gemini. ▪ Conduits are needed to protect the fiber bundle from the effects of the environment, accidental damage or vandalism. ▪ The routing of the cable between CHFT observatory and the weather tower was originally planned using an existing empty conduit. Testing revealed obstructions in this underground conduit are preventing the passing of the cable. There is an above ground conduit on the roadbed, but the diameter is too small to run a cable. No other above ground pathway exists between the CHFT observatory building and the weather tower that is not subject to vehicular traffic. ▪ The area between the weather tower and Gemini Observatory is suitable to lay an above ground conduit. 	
Purpose	To create a fiber optic link between CFHT and Gemini observatories to test the technology and science related to the OHANA project.	

Attachment 5
CFHT Conduit, Cont'd

	Permanent Installation of an Underground Conduit between CFHT Observatory and Weather Tower	Temporary Installation of an above Conduit between the Weather Tower and Gemini Observatory
Construction Activities	<ul style="list-style-type: none"> ▪ Dig a 130' long x 2.5' deep trench in the roadbed between the CFHT observatory building and the weather tower. ▪ Digging will occur at the same time as the trenching for the underground wire grid project. ▪ Lay a 10" – 13" internal diameter rigid conduit in the trench. The conduit includes a 2-inch thermal insulation covering for the temperature sensitive fiber cables. ▪ The conduit at the CFHT building end will emerge and rise adjacent to and enter through the side of the building similar to existing conduits. ▪ At the weather tower end, the conduit will emerge and terminate directly adjacent to the weather tower concrete pad. ▪ The cinder removed from the digging will be used to refill the trench. 	<ul style="list-style-type: none"> ▪ To limit disturbance of the terrain, a conduit will be placed on the ground between the weather tower and Gemini. ▪ The connection will be from the point where the underground conduit from CFHT emerges next to the concrete pad of the weather tower. The conduit will be to 330' long. ▪ A 10" to 13" diameter conduit is needed to pull the fiber bundle and provide a 2-inch thermal insulation covering for the temperature sensitive fiber cables. ▪ The pathway is out of the way of vehicles, snow clearing equipment and pedestrians. ▪ The conduit will be non-abrasive to prevent flaking and will be painted in a non-reflective color to blend in with the terrain. ▪ The conduit will be secured using concrete anchor blocks. Three methods are proposed. A small amount of cinder may need to be displaced to level the concrete blocks. ▪ No new infrastructure is needed to secure the conduit to the Gemini building. ▪ This conduit is temporary and all hardware associated with it will be removed within 3 years of installation.
Mitigation Measures	<ul style="list-style-type: none"> ▪ To prevent interference with existing infrastructure the affected area will be marked off and prior approval will be obtained from HELCO, Hawaiian Telcom and IfA. 	<ul style="list-style-type: none"> ▪ If staking is required to secure the conduit, CFHT will consult with OMKM. ▪ Reflective labels shall be affixed to the conduit exterior stating "Fiber Optic Cable, Do not Stand, Do not Move" ▪ Vertical posts with reflectors will be attached to the conduit or concrete blocks at roughly 40' intervals. ▪ CFHT and Gemini have entered into a Memorandum of Agreement whereby Gemini will uphold the terms of the proposal to install and remove the conduit.

Attachment 5
CFHT Conduit, Cont'd

	Permanent Installation of an Underground Conduit between CFHT Observatory and Weather Tower	Temporary Installation of an above Conduit between the Weather Tower and Gemini Observatory
Permit Requirements	<p>SITE PLAN APPROVAL (SPA HA-06-49)</p> <p>Pursuant to Hawai‘i Administrative Rules HAR §13-5-22 “<u>Basic data collection, research, education, and resource evaluation</u> as identified in the exempt classes established in §11-200-8” requires a <u>Site Plan Approval</u> from DLNR.</p> <p>Exempt activities under HAR §11-200-8:</p> <ul style="list-style-type: none"> ▪ “Basic data collection, research, experimental management, and resources evaluation activities which do not result in a serious or major disturbance to an environmental resource.” <p>DLNR REVIEW – SITE PLAN APPROVAL GRANTED DLNR reviewed this proposal and granted approval on June 8, 2006. DLNR deemed this project to be minor in scope and is consistent with the terms and conditions of CFHT’s Conservation District Use Permit, HA-527.</p>	
Conditions	<ol style="list-style-type: none"> 1. Notify OMKM when it will commence summit construction activities. 2. Walking and hiking on the eastern slope is to be kept to a minimum. Access to the slope is limited to the points where the cables are to be cut and where the concrete junction box and foundation are located. 3. Adhere to the mitigation measures described in its proposal. 4. Allow OMKM rangers to visit and monitor construction activities. 5. OMKM and MKMB recognize that ground disturbance adds to the cumulative impact on the spiritual and sacredness of Mauna Kea. In the absence of a plan for on site monitoring by a cultural monitor, as an interim measure a member of Kahu Kū Mauna Council must be notified and be on site during excavation operations and other activities identified by the Council that require monitoring oversight. 6. Notify OMKM upon completion of the project. 	

Attachment 6
Commercial Permits

FEES

	OMKM Recommendation
Minimum Monthly Fee	\$1,200
Additional Fees	\$6/passenger
Security Deposit	\$3,600 for each Permittee (3 months minimum monthly fee)
Bond	

INSURANCE AND LIQUIDATED DAMAGES

	OMKM Recommendation
Insurance	\$1,000,000/incident \$2,000,000 aggregate
Liquidated Damages for Failure to Release the Permit Upon Termination or Expiration of the Permit	\$500/day or portion thereof beyond the expiration or termination of the permit

PENALTIES

Condition	OMKM Recommendation
Failure to Turn in <u>Daily</u> Activity AND <u>Monthly</u> Reports Prior to Going Up to the Summit	<ol style="list-style-type: none"> \$50 for every daily and/or monthly activity report that is not properly and timely submitted An additional charge of \$20/day for every day that the Permittee fails to submit the daily and/or monthly activity report after receiving notice from OMKM. Repeated failures may result in suspension or termination of the permit.
Non-Payment of Fees or Charges	<ol style="list-style-type: none"> UH may immediately suspend the Permittee’s right to conduct commercial tour activity (Failure to Perform or Comply below); Terminate the permit upon written notice to the Permittee at least five business days prior to termination.
Failure to Perform or Comply	<p>If Permittee fails to comply with any term, condition or covenant of the permit OMKM may:</p> <ol style="list-style-type: none"> Suspend commercial tour activity for up to three days for the first failure. Suspend for a minimum of seven days for each successive failure. OMKM retains the right to terminate the permit at any time, without cause, upon thirty days prior written notice.

MAUNA KEA ACTIVITIES ASSOCIATION (MKAA)

- OMKM is recommending deleting the section in the DLNR permit that requires a single association, in this case MKAA, be the point of contact for commercial tour operators.
- The permits are not with MKAA, but with individual operators.
- The MKAA has not met for several years.
- OMKM is recommending, “OMKM reserves the right to call at least two meetings per year at which all of the commercial activity tour permittees, including the Permittee, shall be required to attend.”