Agenda

Tacoma Planning Commission

747 Market Street, Room 1036
Tacoma, WA 98402-3793
253-591-5365 (phone) / 253-591-2002 (fax)
www.cityoftacoma.org/planning

(Agenda also available online at: www.cityoftacoma.org/planning > "Planning Commission" > "Agenda Packets")

MEETING: Regular Meeting

TIME: Wednesday, July 6, 2011, 4:00 p.m.

PLACE: Room 16, Tacoma Municipal Building North
733 Market Street, Tacoma, WA 98402

A. CALL TO ORDER

B. QUORUM CALL

C. APPROVAL OF MINUTES – Regular Meeting and Public Hearing of June 1, 2011
Regular Meeting of June 15, 2011

D. GENERAL BUSINESS

1. Master Program for Shoreline Development

Description:	Review comments concerning the Shoreline Master Program Update received at the June 1, 2011 public hearing and through the comment period ending on June 10.
Actions Requested:	Discussion; Direction
Support Information:	See "Agenda Item GB-1"
Staff Contact:	Steve Atkinson, 591-5531, satkinson@cityoftacoma.org

E. COMMUNICATION ITEMS

1. Hearing Examiner's Reports and Decisions – *"Agenda Item C-1"*
2. "Rezoning Urban Retail Strips to Create Neighborhood Centers", Zoning Practice, American Planning Association, Issue No. 4, April 2011 – *"Agenda Item C-2"*

F. COMMENTS BY LONG-RANGE PLANNING DIVISION

G. COMMENTS BY PLANNING COMMISSION

H. ADJOURNMENT

Minutes

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(For Review/Approval on July 6, 2011)

MEETING: Regular Meeting and Public Hearings

TIME: Wednesday, June 1, 2011, 4:00 p.m.

PLACE: Council Chambers, Tacoma Municipal Building, 1st Floor
747 Market Street, Tacoma, WA 98402

Members Present: Jeremy Doty (Chair), Thomas O'Connor (Vice-Chair), Chris Beale, Peter Elswick, Donald Erickson, Sean Gaffney, Scott Morris, Matthew Nutsch, Ian Morrison

Staff and Others Present: Donna Stenger, Jana Magoon, Steve Atkinson, Brian Boudet, Lisa Spadoni, Shirley Schultz, Lihuang Wung (Building and Land Use Services); Josh Diekmann (Public Works); Shelley Kerslake (legal counsel); Kim Van Zwalenburg (Department of Ecology)

Chair Doty called the meeting to order at 4:03 p.m.

PUBLIC HEARINGS

1. Billboard Moratorium

At approximately 4:03 p.m., Chair Doty called to order the public hearing concerning the Billboard Moratorium. He explained the public hearing procedures and stated that after the oral testimony the public hearing record will be closed and the Planning Commission will proceed to deliberate its findings and recommendations as a part of the meeting agenda. Chair Doty then called for staff presentation.

Ms. Shelley Kerslake, Legal Counsel, stated that the City Council enacted a 6-month moratorium on May 17, 2011, per Ordinance No. 27982, on the acceptance of applications to install or alter static or digital billboards. The ordinance required that the Planning Commission deliver its recommendations to the City Council by June 1, 2011, concerning the need for and duration of the moratorium, which was the subject of the public hearing tonight.

Chair Doty called for testimony. The following citizens provided comments:

B-1. **Robert Hill –** The moratorium does not meet the test for declaring an "emergency" as he previously has testified to City Council. His main objection is the monopoly of lease rights that Clear Channel has. If there were other affected companies, an emergency declaration may be warranted.

B-2. **Ross Buffington –** He expressed his approval of the six-month moratorium. He also indicated his opposition to digital billboards as he had previously testified at the public hearing on billboard regulations.

B-3. **Susan Ryan –** She supports the moratorium. She stated that many were not aware of the size and number of digital billboards that were proposed and felt that there needed to be more studies and thought put into allowing billboards and digital technology.

B-4. **Jill Jensen –** She voiced her support for the moratorium and stated that the City should take as long as necessary to develop a clear policy on this measure. A sound policy should be developed so that the issue does not come up again. Also, she requested more flexibility in scheduling public meetings so that others in the community could voice their opinion. Another of her concerns was that Clear Channel had the support of a fulltime paid staff, non-profits and businesses and that average citizens do not have this advantage in making comments, and she asked the Commissioners to take this into consideration.

B-5. **Erik Bjornson (North End Neighborhood Council) –** He commended the Commissioners on their stand and their leadership and acknowledged that the moratorium was a direct result of all the hard work and all the facts that had been evaluated by the Commission. He cited the number of neighborhood groups and the 95 percent of citizens who support the ban on digital billboards. He asked the Commission to continue to make their stand against digital billboards and not be swayed by the special interest groups that Clear Channel would bring in to put a "favorable face" on their request to have a billboard amendment passed. He stated that non-profits would still do just fine without the support and contributions of Clear Channel for advertising.

B-6. **Britton Sukys –** He commended the Commissioners on a "perfect" recommendation letter to the City Council and encouraged the Commission to take as much time, whether six months or even a year, to re-write the Code that would ban digital billboards and reduce the number of non-conforming billboards.

B-7. **Brian Jacobs –** He supports the moratorium. He asked that the Commissioners take as much time as possible to study all of the aspects of the Billboard code amendment. He stated that the Commissioners should act on three critical issues as they further evaluate billboard regulations, i.e., (a) Act to ban all digital signs both on-premise and off-premise; (b) Revisit the regulations that were adopted in 1997 for banning billboards to provide clarity and ensure that these regulations can withstand any legal challenges and the ban should remain in force including prohibiting digital billboards; and (c) Any adoption of ordinances concerning billboards should take into consideration the "holistic" view of how billboards fit in with the vision of the City and not just be put in place to satisfy a lawsuit from Clear Channel. The majority of Tacoma citizens do not want digital billboards because they do not improve the vision of the City. He commended the stand that the Commission had taken in their recommendation letter and said that digital billboards have no place in the City.

B-8. **Richard Frederick –** He wanted to go on record to urge the City Council to continue with the moratorium and completely ban the billboards in the future.

B-9. **Olivia Lippens (Clear Channel Outdoor) –** She indicated that Clear Channel (along with its predecessors) have done business in Tacoma for over a hundred years, has maintained decades-long relationships with multiple non-profits, and has been a member of the Chamber of Commerce for 35 years. They hire union labor, and half of their employees are based in Tacoma and Pierce County. Clear Channel understands the City's desire to take a step back and evaluate whether or not their position in implementing new technology in Tacoma makes sense, however, there is no moratorium needed to prevent the construction of digital billboards, since the current code does not allow for them to be built. She indicated that the moratorium effectively prevents Clear Channel from exercising their property rights with the permits they currently hold for continued relocation and construction of signs, and prevents Clear Channel from conducting routine maintenance on existing signs as required by OSHA and other regulatory bodies. In essence, the City would be asserting a taking over these privately owned assets without compensation by prolonging the moratorium. The longer the moratorium is in place, the more exposure the City has relative to the 169 banked credits that they currently hold. She also pointed out that digital has widespread use throughout the City of Tacoma – for on-premises signs, on freeways and highways (by WSDOT), and at the Tacoma Dome. She felt that Tacoma does not have an issue with the technology of digital, but who has a right to use it. Extending the evaluation beyond the settlement agreement will result in returning to litigation but it also opens the City up to additional issues. The more delays put on this process, the higher the likelihood that it gets pushed back to litigation. She added that the moratorium will not alter the August 15, 2011 deadline of the settlement agreement.

B-10. **Anders Ibsen –** He favors the moratorium. The community does not want digital billboards and has spoken against encroachment by the visual blight caused by billboards in their neighborhoods. He stated that there is no infringement on free speech by these regulations. If the City were to cave in to threat of law suits that every "out-of-state lawsuit happy corporation" might bring pressure to bear against reasonable laws, we would have anarchy. We would lose our cherished assets and our quality of life would be threatened and it would undermine the very fabric of the rule of law. This moratorium is the first step of the City's long term goal toward retaining the 1997 reasonable ordinance.

B-11. **Beverly Ibsen –** She is in favor of the moratorium. She felt that it may be necessary to clarify the existing Ordinance to make sure that the City is on firm, legal grounds. She has read the comments of Doug Schafer and expects that he will have additional comments to contribute. She also felt that the City is in the right in defending the existing Ordinance. She hoped that Clear Channel will accept the Commission's recommendation and the recommendations of the citizens against digital billboards. Clear Channel is not in the right and does not have "clean hands" as exhibited by their purchase of non-conforming billboards knowing in advance that the boards were required to be removed in 2007. She said they are negotiating in "bad faith". She hoped that they are not rewarded for the bad faith that they have shown by giving them digital billboard rights. She commented on the many problems caused by digital billboards that were addressed in earlier meetings.

B-12. Tricia DeOme (Central Neighborhood Council) – She addressed support for the moratorium and said that the moratorium will give time to step back and look at this as a policy. It will give a chance to develop a Code that everyone really wants and is not a result of a lawsuit. She added the caveat that the City should require the removal of all non-conforming billboards and to not allow digital billboards in Tacoma. Although she has not discussed this with the Central Neighborhood Council, she personally feels that moratorium should be extended to on-site digital signage as well because these signs are related to the same issues such as light distractions and driver safety as digital billboards.

B-13. Eric Heller – He supports the draft Letter of Recommendation to the City Council that is being considered by the Commission for submittal. He said that this action by the Commission is a "great" example of democracy working – the people have spoken out and the Commission listened and passed that information on to the City Council. He would like to see going forward that the government continues to listen to the people and not corporate interests.

B-14. Harlan Shoop – He is in favor of the moratorium. He asked a question of Commission about who is responsible for changing the sign code? Chair Doty answered that it was the Commission's responsibility to recommend the changes to the City Council. Mr. Shoop responded that it seems like the time to look at sign regulations again in view of what we want our City to look like and that now it seems as if the City has been a little overboard by allowing too many commercial signs.

B-15. Douglas Schafer – He started off by clarifying that it wasn't clearly indicated in Ms. Lippens' testimony that Clear Channel does not have an office in Tacoma. He thanked the Commissioners emphatically for their strongly written report issued on May 18th and the associated findings. He stated that he had sent an e-mail and a copy of a report to Commission staff indicating that most of the billboards in the City were probably rendered non-conforming in 1988; the 1992 Code appears by its terms to prohibit all billboards in the City; the 1997 Code does not expressly permit billboards anywhere; and none of these Code or Ordinances contain any definition of digital billboard or electronic billboard or anything along those lines. But sometime after 1998, conventional billboards were expressly permitted in four zoning districts (C-2, M-1, M-2 and Port Industrial PMI). It is not clear in the existing code that the City could refuse Clear Channel to erect a digital billboard in those four zones that are presently zoned for a billboard. The only prohibition that the City could have against installation of digital billboards are those that are non-conforming but those designated as conforming billboards could certainly be converted to digital billboards. So the enacting of the moratorium is essential, and six months is the minimum necessary for a thorough investigation to look at studies (such as a pending study underway from the Federal Highway Administration) and other concerns that are associated with this issue.

B-16. Andrew Nordhorst – He is in favor of the moratorium on digital billboards and reducing the number of billboards within the community. In response to Clear Channel's statement that they had been in business for 100 years, he indicated that there are a lot of things that have been here for 100 years but that they are now obsolete, outmoded and outdated. Digital billboards are the next generation of static billboards that are now considered obsolete. He commented he was involved in an accident where the other driver was not paying attention and became distracted by a digital billboard. Billboards

should be considered as being obsolete and the Commissioners should consider removal of billboards.

B-17. William Osborne – He would like to have twelve months for City staff to study proposed billboard code amendments to present to the City Council; six months is not adequate time. Billboards are not welcome, that's been clearly stated in this community. The City is trying to move toward place-making based on people and livability. Billboards are for a car-dominated community and that doesn't jive with Tacoma's future.

B-18. Patricia Menzies – If billboards have been around 100 years, then they have outlived their usefulness. The City banned them a long time ago. Don't be fooled by arguments for businesses and nonprofits needing billboards – businesses survive with other advertisement options and there are other media outlets for nonprofits to use. The moratorium allows more time for discussion and perhaps should include a roundtable with nonprofit stakeholders on how they can get their message out without the use of these massive signs. We need a more green way to do advertising and keep Tacoma beautiful.

B-19. R.R. Anderson – Billboards have been here 100 years, much like arsenic and the lead poisoning of the earth beneath our feet. They depress property values and make it easier to destroy historic buildings; they destroy hope and make people easier to manipulate; they keep Tacoma "crappy"; plus, they help with accidents and providing organs for donation through traffic accidents. Clear Channel makes it easier for these to happen. This company is going to sue you. Constitutions matter!

B-20. Jamie Chase – She supports moratorium, even though her family leases billboards from Clear Channel and she used to be in the advertising business. She read the words of the Outdoor Advertising Association of America to point out that billboards "are ever-present and sneak up on you where you can't avoid the advertising". She supported maintaining the moratorium until Clear Channel pays their fines of $33 million. She asked how much profit is enough profit? She provided for the record documentation of Clear Channel's revenues which are up due to increases in digital signage. She also submitted for the record two studies pertaining to billboards.

B-21. Carl Teitge – He supports the moratorium. The City needs more time, and we should have taken it in the first place. The proposition is to get rid of non-economic signs for signs that are economic – but do we want that? We don't want to be Las Vegas. Static billboards are obsolete, and they were ugly then and ugly now. They will go away on their own, and we don't need an ordinance to make it happen.

B-22. Glen Sukys – Tacoma is improving, with all its museums and arts. A step away from billboards is better, classy, and the right direction. He supports the moratorium and he would like the City to get rid of all billboards.

Chair Doty concluded by thanking everyone for their comments and declared the public hearing closed at approximately 4:57 p.m.

The Commission took a 5-minute recess.

2. Master Program for Shoreline Development

At approximately 5:03 p.m., Chair Doty called to order the public hearing concerning the Shoreline Master Program Update. He explained the public hearing procedures, stated that written comments will be accepted through Friday, June 10, 2011, and called for staff presentation.

Mr. Stephen Atkinson provided a brief overview of the subject of the public hearing, i.e., the Shoreline Master Program Update package and its contents. He also summarized the technical analysis, environmental evaluation and public review process for the package, as well as the notification efforts for the public hearing.

Chair Doty called for testimony. The following citizens provided comments:

S-1. Dolly Lampson – Ms. Lampson started off speaking about air pollution that can make her friend, who has cystic fibrosis, really sick. Continued pollution from existing industries will kill our city. Right now she and her family go to other cities and communities when they wish to have fun biking and sightseeing. These other places are where they spend their money. The City needs to extend the waterfront walk to give families a place to come and "hang out". Sixty years is just too long to wait. The walkway should support biking from the LeMay Museum all the way to Point Defiance. She explained that it is her responsibility to tell the Commission what she wants for the City and that it is the Commission's responsibility to plan for the City's future.

S-2. Toby Murray (Tacoma-Pierce County Chamber of Commerce) – He spoke against the SMP and said the draft does not balance the three objectives of the Shoreline Management Act equally. It favors public access over ecological functions and preferred uses. He also spoke out against rezoning the Sperry Ocean Dock property; a water-dependent industrially zoned and industrially occupied site for 130 years. He said that accusations that industry is expanding into pedestrian and recreational areas is false and the exact opposite is the truth. This change of shoreline district boundaries is an attempt to force this business out of the community. He noted that the draft SMP continues to misinterpret nexus and proportionality and places the burden on the property owner and not the city. He also commented on removing the ban on the ability of existing businesses to expand beyond property ownership on the eastside of the Thea Foss.

S-3. Laura Fox (Tacoma Public Utility Board Member and commercial real estate broker) – She supports the Tacoma-Pierce County of Chamber's comments. She commented that the lack of provisions supporting existing businesses caused several businesses that were interested in re-locating to Tacoma to opt to go elsewhere because they had the perception that Tacoma is non-friendly to businesses. The Shoreline Master Program could do much to counteract this perception and serve as proof that it is a misconception. It is obvious that this perception is being reinforced by the way the Sperry Ocean property has been treated in the Draft SMP. The company that currently occupies this property has done much to cooperate with the City and promote ecological restoration by reopening the tidelands to provide increased habitat. The business provides vital training and function for the federal government and is a national resource. The change in zoning boundaries would harm this business and the good paying jobs associated with it. Ms. Fox concluded by asking the Commissioners to use a "common

sense" approach to allow existing businesses to be placed in the appropriate zoning. Having the recreational S-6 zoning move into the S-7 industrial zone makes no sense; however, moving existing light industrial businesses from the S-8 Thea Foss Zone to the S-10 Port zone does make sense. She urged the Commissioners to not be swayed by the emotions of others with their own personal agenda.

S-4. **Mike Elliott (Brotherhood of Locomotive Engineers) –** He indicated that his organization represents engineers that work on the network of the four train systems that operate in Washington State and stated that they are in full agreement with the stand taken by the Tacoma -Pierce County Chamber of Commerce and ILWU Labor Union on this matter. In support of that position, he offered the following comments: (a) keep the S-7 current zoning as is to support deepwater industrial uses and maintain future opportunities for deep water commerce. The waterfront property between Sperry Ocean Dock and TEMCO Dock are owned and maintained by the railroad and are important to safety and commerce. He supports the use of Bayside Trails to provide public view access along this stretch of waterfront. The best gift that that we can provide our young people is to maintain the prospect of a family waged job in industrially zoned areas along Tacoma's waterfront.

S-5. **David Schroedel ("Walk the Waterfront") –** He has worked with a number of jurisdictions that are updating their Shoreline Master Programs ranging in scales from large to small. Each of these cities has unique issues that need to be addressed uniquely, but one common issue that constantly comes up is public access. His organization has some specific concerns related to public access: Strike the proposed automatic exemption for specific uses in specific areas without having to consider whether public access is possible. Access does not need to be 24 hours and cited access at Seattle's grain elevator that is closed and gated when industrial activities are going on for security concerns. State Law is very clear on this and he suggested the City adhere to the intent of the State Law. Alternative methods to on-site should be evaluated and a key way to provide public access is to establish an access fund to lower the cost for doing business by those who cannot provide public access on-site. He commented that his organization supports the expansion of the S-6 zoning. Communities that have the most success are those that make public access paramount and the access is highlighted whether it is in front of the Glass Museum or along Ruston Way. You will notice that the key element that makes these areas successful is that people are able to gather together; however a key element that is missing in Tacoma is the link for public access along Schuster Parkway.

S-6. **Gary Coy (Sperry Ocean Dock) –** Mr. Coy is in agreement with all comments made by the Tacoma-Pierce County Chamber of Commerce. He stated that the existing S-7 zoned area includes Jack Hyde Park, the Chinese Reconciliation Park and Tahoma Salt Marsh; all of which were built in the S-7 light industrial area. He noted that this zone has given up more area for public access with 1,800 linear feet given over to public access and taken out of the approximately 6,000 linear feet of shoreline for this purpose. His company supports the expansion of the S-6 area up to the westward edge of the Tahoma Saltmarsh, leaving the Saltmarsh in the S-7 area. He also pointed out that there has been a misconception regarding expansion by Sperry Ocean Dock and that since 2007, there have been no plans for expansion. Mr. Coy would like it noted that his company removed pilings and restored the beach area at its own expense. He also noted that the Dome to Defiance Study on pages 32 and 33 recommends keeping the S-7 zoning intact.

S-7. John Roller (NuStar Energy LLP) – Sees his company's long term vision as being a part of the City of Tacoma and in order to do this they look at health, safety, environment, and community service and honor these as core values. They consider their employees as their number one priority and asset. Another cornerstone of their company is safety and environmental stewardship and they have never deviated from that. He stated that his facility is a leader in Tacoma for all these categories. The company has had only one injury in 11 years. He noted that the 12 employees who work there put in about 75 hours a month in public service. He would like assurance that he will be able to continue his business in Tacoma in the future and he does not feel that the SMP, which would rezone his property to S-8, provides his company with that assurance.

S-8. Loren Combs (lawyer representing NuStar) – Mr. Combs stated that there will be further documents that he will be submitting to the Commission, but he feels that NuStar is a company that cares about giving back to their community and environmental concerns and that Tacoma city officials should care about keeping them in our community. The current proposal does not give them the stability to continue to do that.

S-9. Sandy Mackie (lawyer representing Schnitzer Steel) – He is here to focus on two issues – critical areas and public access. He said that he wanted to inform everyone at the meeting of two myths: (1) critical areas protections require buffers on all shorelines, and (2) the Shoreline Management Act requires public access as a condition of granting a shoreline permit. He said that the correct standard under the Act is "no net loss" not a buffer and asked the Commission to look at what the laws for 2010 stated concerning buffers and follow that law. He went on to say that not all shorelines are critical areas and not all critical areas require buffers. He further explained what the law says regarding public access and said that public access is not authorized as proposed by the Shoreline Management Act, Coastal Zone Management Act, or the Public Trust Doctrine. The burden of proof rests with the City when access is required. If a company has interfered with an existing form of access, you have to replace it and if there is a cause for increased demand for public access, you must meet that particular demand. But if a project on the shoreline does not create a demand then no access is required.

S-10. Matthew Boyle (Grette and Associates) – He is in support and agreement with the comments and recommendations of the Tacoma-Pierce County Chamber of Commerce as well as the comments that were submitted in March by Citizens for a Healthy Bay. He feels that when the business community and environmental community agree on something it is something to take notice of. He highlighted two concerns in the SMP. He cited the inconsistencies between the proposed changes in the shoreline district boundaries when compared to the intent and purpose statements of the zoning and environmental designations. The industrial facilities and railroad infrastructure along Schuster Parkway do not meet Department of Ecology's Urban Conservancy Designation criteria and the S-6 zoning. This area should remain in High Intensity Use designation and stay zoned as S-7. There is no reason or rationale for proposing a change. He further commented that the proposed fee-in lieu is too vague.

S-11. Jeff Callender (Conoco Phillips) – The company is located on the eastside of Thea Foss Waterway. He spelled out the functions and the operational times of his business. He stated that the requirements of the draft SMP would require his company, a water

dependent industry, to provide access to the public or the pay a fee in lieu of providing access. Mr. Callender explained because his company is governed by Homeland Security, they are not in a position to offer that access; furthermore, he does think that any aspect of their business creates a demand for public access. He would like to see his company have a more appropriate S-10 zoning designation. He also stated his concern with an interim amendment enacted in 1996 which hinders his and other businesses in the area from expanding. Further, he commented that one of the options in the Foss transportation study for the eastside would remove truck traffic from East D that would significantly affect his business.

S-12. Jason Jordan (Port of Tacoma) – Mr. Jordan acknowledged the monumental undertaking that is involved with development of the draft SMP. He commented that the Port's executive management and Board developed guiding principles for Port staff to use direction when commenting on this process. The principles include working to protect Port maritime water-dependent and water-related uses; discouraging incompatible uses adjacent to the Port; and promoting public access and environmental restoration when appropriate, safe and feasible. Another principle addressed having an efficient, predictable, and balanced regulatory process. The Port would like City staff to take a closer look at the permitting process to ensure it is clear and streamlined. He specifically cited the Exemption Section because as it is now written it appears that it could be more burdensome and expensive for businesses to comply. The Port believes the City should rely on the JARPA application that is already used by other State and federal agencies. Further, the exemption section need more clarification to allow for routine maintenance and repair and allow maintenance dredging and demolition as currently allowed. He asked for an administrative appeal process for permits and exemptions and to allow existing log storage as a permitted use in S-11. He had two comments on the eastside of the Foss. He stated that the public esplanade should end at East 15th and the ban on the expansion of industrial businesses should be lifted.

S-13. Scott Mason (International Longshoreman's and Warehouseman's Union, Local 23) – He stated that his association agrees with all the comments and recommendations submitted by the Tacoma-Pierce County Chamber of Commerce. He gave a brief history of the number of staff and the various activities that his association is involved with. He stated that deep water is a limited commodity that belongs to all the citizens of the State and that the Planning Commission is charged with making decisions that affect not only his association but all citizens. Mr. Mason wanted it noted that the Commission's decisions were not just for the benefit of those who wanted public access but also for the working community on the waterfront. He stated that S-7 designation should stay as it is. He would have preferred that the Container Port Element could have been addressed first and asked the Commission to take into consideration that section of the Growth Management Act before they make their final recommendation. He asked that economic facts be taken in to consideration before a maritime use is zoned out of compliance. He concluded that the conflict for use of the waterfront pits two ideas against each other; industry and jobs versus view property and gentrification. He noted that ships docked at Sperry help in time of natural disaster and will be hard to replace.

S-14. Bruce Baurichter (Firefighters Union, IAFF Local 31) – The union members support the comments and recommendations of the Tacoma-Pierce County Chamber of Commerce. He asked that the boundary between S-7 and S-6 be kept in place as is. By keeping the boundary in place the citizens of Tacoma would be assured of keeping a

balance in place and keeping everyone safe within their own space. Firefighters' paramount issue is to keep everyone safe and this can best be achieved by keeping S-6 zoning for recreation and S-7 zoning for light industrial. Another key aspect that the existing business in the S-7 maritime industrial zone plays is in making portions of their facilities available for the training of City firefighters and Bates Technical School firefighters. He concluded that the business and jobs in S-7 Zone help pay for the quality of life that the citizens throughout out the City enjoy in the S-6 Zone.

S-15. Mark M. Martinez (Pierce County Building Trades) – He does not support the current draft. He spoke regarding workers having serious concerns about the draft SMP and its lack of support for keeping jobs at the Port. In particular, he brought out that the SMP would jeopardize Simpson Kraft remaining in Tacoma. He also felt that those businesses that had spoken earlier in the hearing were willing to relocate to other cities if Tacoma passes the proposed SMP. He said that would be a hard economic hit and "high paying wages" would be replaced by low pay minimum wage jobs if the draft was adopted. His conclusion was that if Commission wants to keep Tacoma economically viable then the draft SMP needs to be more supportive of industry. He ended a strong note when he said, "This is Tacoma, we are not Seattle, we will never be Seattle, but we are going to be the working class Tacoma that we have always been for the past 150 years".

S-16. Bea Christophersen – She spoke about using "common sense" and having a balance that takes into consideration beautification and amenities and economics and industry. Industry on Ruston Way at one time was "king" and that was all there was. When she first moved to Tacoma, Ruston Way was "awful" and abandoned industry was prominent. She then fast forwarded to the conditions that exist there now that industry has left, the area has been cleaned up and public improvements have been built. Ms. Christophersen believes port industries are a valuable and coveted asset that other cities would like to have. She feels that industry on the Port makes it possible for the City to have the beautiful walkways and the views along Ruston Way and she would like to see these uses remain. In conclusion, she feels that the waterfront should remain as is because we need industry as well as beautiful places to walk and have recreation.

S-17. Su Dowie (Foss Waterway Development Authority) – Ms. Dowie mentioned letters previously submitted to the Commission that she would like to include as a part of the hearing record. One concern is public access and the composition of uses that occur on the Foss Waterway. On the westside is a mix of soft uses and on the eastside is a mixture of restaurants and industry. She said there should be a difference in the development of public access under these unique circumstances, but that each component is very much needed on the Tacoma waterfront. She asked for clarification of the landscaping requirements and stated that there are potential conflicts with public access and concern over which would prevail. Ms. Dowie also commented that the Board is supportive of removing the ban on existing industrial uses in the S-8 zoning thereby allowing these businesses to continue to grow.

S-18. Mike Lonergan (Youth Marine Foundation) – His operation is in the S-8 zoning and he went on to tell of his experience in getting a permit for some work done at his site under the existing regulations. He commented that the City wanted them to put in place more than what was needed trying to satisfy requirement for public access. His feeling is that by doing this, the City over-reached the actual requirement and could have jeopardized their remaining at this site if they had stuck to the original requirements proposed as a

condition of the permit. He said that Tacoma exists because it has a deep water port where "rails meet sails." He supports fully the recommendations of the Tacoma-Pierce County Chamber of Commerce. He also noted the anomaly of both the Citizens for a Healthy Bay and organized labor also supports the same recommendations that the Chamber of Commerce has made.

S-19. Sara Clair (Greater Metro Parks Foundation) – Sperry Ocean Dock does not provide public access and the Metro Parks Foundation has consistently expressed support for a public walkway from the Tacoma Dome to Pt. Defiance. She would like S-6 Zone to continue to Thea Foss in order to plan for the future to make the Schuster Parkway shoreline more accessible to the public. She said that Tacoma has been working on the project of connecting Ruston Way and Thea Foss for 60 years. She noted that industry has been a drawback to establishing this system. She recommended that no waiver should be granted for building public access in this part of the waterfront.

S-20. David Rietmann – He supports the expansion of the S-6 Zone up to and including the Sperry Dock site. He acknowledged that the Sperry Dock has property rights and would continue operations but would be prevented from expansion. Industrial areas should not have to provide public access because it is a safety issue and it makes no sense to do this. He commends the City staff for taking a stand to extend S-6 zoning. Sperry Dock is the end of the Ruston Way experience. Vessels that are at the Sperry Dock are incompatible with the neighborhood and episodically pollute the neighborhood with emissions. He commented that the City Manager has weighed in on this issue by requesting DNR to not renew the lease of public lands for use by the vessels.

S-21. Carl Teitge – Mr. Teitge mentioned that he was on the Planning Commission from 1983-1988 when the City was planning for Ruston Way and the Foss Waterway and heard similar concerns expressed about industry and public use of the waterfront. He mentioned the many industries that were once located on Ruston Way, the Foss and in the Port area and how these businesses are all gone now. Mr. Teitge said that the draft SMP is not asking for too much of a change to allow more public access on a very small portion of the waterfront by rezoning S-7 to S-6 and that this change is not a threat to the operations of the Port. He also opposed relying on Bayside Trails as acceptable public access. His house is adjacent to the trail and parts of the trail could be classified as a stream now.

S-22. Ron Coleman – Mr. Coleman also indicated he is a former member of the Planning Commission, and supports the extension of the S-6 Zoning all the way from Point Defiance to Thea Foss. Opposition to this approach is not new. He would like to see the Commission continue the dream and provide the leadership so that the City can have one of the most beautiful waterfront parkways around as envisioned and planned for in the 1980s. If zoning is changed to S-6, Sperry Ocean Dock and TEMCO would not go away, they would be "grandfathered" and continue current operations. We will lose no jobs. He sees no reason to require public access in the Port. However, a walkway is needed along the western edge of Commencement Bay. He said the Commission should not underestimate the value of a well designed inner harbor as a tourist attraction. He acknowledged that there are obstacles to building the continuous walkway but that shouldn't stop the planning; these obstacles can be overcome.

S-23. Leslie Ann Rose (Citizens for a Healthy Bay) – She noted that her organization works to clean up and protect Commencement Bay and its habitat. She identified the draft SMP as the best in the Puget Sound area and is a well-written and integrated document. She said the SMP needs to realistically reflect Tacoma's shorelines and that a diversity of public access should be provided.

S-24. Bett Lucas – She supports all the comments and recommendations that have been made by Tacoma-Pierce County Chamber of Commerce. She said that in no way has the Sperry Dock, railroad or industry hindered the value of her condo located nearby or her enjoyment of the Tacoma waterfront. She feels that the jobs the waterfront industries provide is very important and make Tacoma a more viable place in which to live. She said that the businesses that are in Tacoma should be retained in these difficult economic times.

S-25. Pierson Clair – Tacoma is a city of change and gave a brief history of the many changes that have occurred in the city. The Port has changed and now wants to expand into his neighborhood. He is in support of the expansion of the S-6 zone all the way to TEMCO. He envisions a vibrant and beautiful City if we continue to work toward change and is encouraged by the process the SMP takes to accomplish this. We could have an 8-mile walkway by the water for families with children to walk and enjoy.

S-26. Dennis McGovern – Supports the change that has S-6 being extended to include the Sperry Ocean Dock site. The Sperry site has little potential for other uses than what it is currently used for or a as a park. He stated that the current use of the Sperry Dock is not actually an industry; nothing is manufactured there; the parking of two ships does not conform to the current zoning of S-7. Those ships should be parked and the military would be better served if they were parked in Bremerton. The Bayside Trails is not a reasonable alternative for shoreline public access; it is just a muddy trail. This whole process is about planning and it was 60 years in the making. The goal is to make our waterfront vibrant to attract people, visitors, businesses and the City needs to continue this and make the final leap.

S-27. Lara Hermann (Walk the Waterfront) – She said the discussion so far pits industry versus people. This is outmoded thinking. Ms. Hermann would like to adopt a plan that says people and industry can co-exist. She said other cities have been able to accomplish this and that Tacoma can thrive by also finding a way to incorporate uses that will work for the good of the average citizen and retain jobs. Ms. Hermann outlined changes she would like to see in the draft that would put more teeth in the waiver exemption for public access and why this was important. She supported the use of fee-in-lieu but only after an on-site waiver was granted. She supported eliminating the S-7 zoning and rezoning the entire area as S-6. The two existing businesses would be grandfathered in.

S-28. Eugene Wiegman (Former President of Pacific Lutheran University) – Jobs are important, but they are not everything. Keeping the waterfront looking great and prosperous is important too. He said that comments on making the Sea Scout site industrial was not necessarily correct as he was on their Board and he did not recall that this was discussed by the Board. He says industry has changed and the Commission should look to the future.

S-29. Joe Martinac (Martinac Ship Building) – He said he is not opposed to walkways and the esplanade, but he is concerned about safety. He would like to be able to co-exist with those who want a walkway placed in the industrial area, but does not see how that can be safely done. He believes the current SMP draft exempts existing Foss businesses from providing public access and he would like that verified. He urged Commission to be sure of what the SMP says and to look closely at the fine print so that problems do not occur in the future. He does not want to fight local government to stay in business.

S-30. Dave McEntee (Tacoma Simpson Kraft Co.) – He says there is a lack of leadership on the issue of public access. He believes that industry and the City can develop a workable solution. He is concerned about adjacency. He said that staff may not understand the needs of businesses on the waterfront. He believes that allowing softer uses that are adjacent to industrial uses are a threat to industry. The draft SMP is shrinking the S-10 and S-7 industrial zoning. He also noted his concern about removing log storage as a permitted use in the S-11 district.

S-31. Jit Singh – Mr. Singh supports the extension of the S-6 zoning. He commented that TEMCO is a nice facility and in the past he was able to see the benefit of having industry on the waterfront, but now things have changed and this part of waterfront is no longer a place where recreational and other amenities can be enjoyed. He would like to see the proposed walkway built.

S-32. Bill Stauffacher (TEMCO and BNSF Railway) – He would like to see that City, industry and the railroad work toward collaboration and not be in conflict. He said other jurisdictions have been successful in working with the railroad to make improvements through collaboration and not by passing restrictive zoning. Community interests are aided when people come together and make decisions together to have trails and other amenities. Unfortunately the draft document is trying to force change by making zoning changes. The Chambers Bridge to the waterfront is the result of Pierce County working with the railroad. Tacoma can have a waterway trail without making these changes to the current Shoreline Master Program. He said the proposed fee in lieu change is more to have someone else responsible for paying for the improvements. Industries just do not lend themselves to be safe places for the public and should not be required.

S-33. Steve Schain – He supports a walkway in the S-7 district. He questioned why the Port was so interested in the Sperry site that has limited potential for industrial uses. Having an attractive city will attract jobs. He claimed that the Commission's job is to protect the future and asked that they not move backwards. We have to figure out a way to make industry needs and citizen needs compatible, it does not have to be a war.

S-34. Chris Winters (I.U.P.A.T Local 1964) – Mr. Winters spoke in favor of the recommendations submitted by the Tacoma-Pierce County Chamber of Commerce. It is important to have the Port economically viable. They provide family wage paying jobs. He stressed that other Ports covet the business that is done in Tacoma and if conditions are not conducive to doing business here, the City could lose out to those other national and international ports. He would like to see collaborative efforts made between the City and industry to help the Port achieve public access as well as maintain industry.

S-35. J. J. McCament (representing Pt. Ruston Development) – She asked for greater clarity in the definition of the S-15 zoning jurisdiction as their site includes parcels that are both within and outside shoreline jurisdiction. She requested that the Conditional Use permit requirement for multifamily townhomes be eliminated for upland areas outside of the 200 ft. shoreline jurisdiction. She also asked that townhomes be allowed within 100 ft of the shoreline and that the number of such homes be restricted to 25. This would give the developer more certainty. She asked that the definition for townhomes be revised in a way that is not tied to ownership of the land due to the environmental agreements for the site. She thanked the Commission for going above and beyond to get input from everyone.

S-36. Heather Trim (representing People for Puget Sound and Futurewise) – Ms. Trim commended staff for a well written SMP that is easy to read and understand with good ecological protection standards, but stated that her organization has some issues with the exemption process in that they do not believe that it is clearly defined and would like it re-written, made clear, and strengthened. Environmental designations also should be looked at and strengthened as there are areas in the City with existing vegetation that should be protected with a natural designation. She is also concerned about the wetland buffers and suggested that buffer widths should be enlarged. She also expressed concern about overwater parking which over time should decrease. She suggested that standards for live-aboards should address both black and gray water and the discharge of chemicals.

S-37. Rick Rose – Mr. Rose stated that in 2007 he previously submitted a proposed Comprehensive Plan Amendment in which he asked that the current S-7 zoning be modified to extend the Ruston Way S-6 zone down to the TEMCO property. The purpose of his proposed amendment was to minimize the impact of industry along Schuster Parkway on adjacent residential properties. There is an inadequate buffer between Sperry Ocean Dock and adjacent residential properties who are impacted by the operations at the site. Mr. Rose says this is an ongoing problem for the neighborhood. He believes that his proposed amendment was visionary and is needed even more so now to address air, noise and light pollution. The proposed recommendation for extending the S-6 zoning through the Sperry property is good but it does not go far enough. The extension should go all the way to the Thea Foss Waterway and because existing industries are “grandfathered in” there should be no loss of jobs.

S-38. Linda Heaton – Ms. Heaton is in support of S-6 zoning going as far as TEMCO. She used a quote that stated: “It is hard to create a space that does not attract people, but it is remarkable how often this has been accomplished”. Ms. Heaton expressed that there has been a dramatic rise in interest in the waterfront since people everywhere seek great public spaces that can be enjoyed by the community as a whole and that waterfronts are a finite resource. Tacoma has a waterfront that should be promoted. The best solution should be to put public access first – not short term financial expediencies. She wants the city to have a shared vision for promoting the waterfront and stated that unlike a Master Plan, a vision process does not lock a project into a prescribed solution. A shared vision sets the stage for people to think boldly, make breakthroughs and achieve new possibilities for their waterfront. Waterfronts are too valuable to allow developers, business or the Port to dictate the terms of growth and change. This does not mean that these entities are unwelcome or discouraged; on the

contrary, it is necessary to the future of a healthy waterfront, but whatever is built must contribute to goals set forth by the community and not detract from them.

S-39. Kyle Price (Serves on the North End Neighborhood Council) – He supports the extension of S-6 zoning and suggests that the Commission lay the groundwork for a waterfront walkway, which would be a City amenity and regional attraction stretching from downtown to Point Defiance. It is important to note the SMP is not just about the people who live and work by the water. The SMP is about livability for the whole city.

S-40. Scott Wagner (Narrows Marina) – Mr. Wagner is concerned about how the draft SMP treats nonconforming uses and structures and said that it does not seem reasonable. He wants to know why the draft SMP uses an arbitrary figure to determine when a nonconforming use or structure can be rebuilt when damaged. He requested that the 75% threshold be removed. He also assured the Commissioner that he is already providing public access at his business and is concerned that every time he makes an improvement that he would be required to provide additional access.

S-41. Judy Rose – Think big. Be courageous. Give us the waterfront that we can be proud of. Don't give up easily.

Chair Doty concluded by thanking everyone for their comments and stated that all written comments will be considered until June 10, 2011 and that all comments will be duly considered. The public hearing was closed at approximately 7:20 p.m.

GENERAL BUSINESS

1. Billboard Moratorium

Ms. Shirley Schultz provided an overview of the written public comments received regarding the Billboard Moratorium. She noted that the comments had been previously provided to the Commission including comments that were distributed to the Commission at the start of the meeting. There were about 46 pieces of communication; most of the comments were in support of continuing the moratorium. Ms. Schultz broke down those comments as to content and said that 20 letter said the moratorium was in the best interest of the City to have an extended policy discussion and to develop a better Code dealing with billboards; 5 or 6 letters said to extend the moratorium beyond the 6-month period to allow ample time for this discussion to occur. There were some letters in support of allowing billboards and one letter that stated that billboards were a vital aspect of our community and good for business and for advertising. There were about 9 or 10 letters that were supportive of Clear Channel as a business enterprise, noting the benefits that Clear Channel provides to the community including pro bono advertising services, support of non-profit groups, etc.

The Commission did take note of the oral testimony of Clear Channel and had a question regarding whether or not the moratorium interfered with routine maintenance of billboards and that this could be a safety issue. Ms. Shelley Kerslake answered that it was not the intent of the moratorium to interrupt routine maintenance and that this may need to be clarified in the final moratorium ordinance. The Commissioners also asked if the 169 billboard permits that are vested were affected by the moratorium provisions; Ms. Kerslake answered that the moratorium ordinance does not address this particular issue specifically. The Commissioners also wanted to

know if they could recommend a longer time for the moratorium to run and Ms. Kerslake said that moratoria are limited to 6-month duration but can be for a period of up to one year if a work plan is established. She also noted that moratoria can be extended in up to 6-month intervals following a public hearing. The Commission expressed concern about on-premise digital signs but determined this was outside the scope of the present moratorium. The Commissioners requested that this be included in the work program for consideration in the coming year.

At the conclusion of discussion, the Commission voted and passed unanimously to approve and forward to the City Council the Letter of Recommendation and the Findings and Recommendations as included in the agenda packet, with two revisions to the findings: (1) that the issue raised by Clear Channel regarding regulatory takings as it relates to the relocation permits should be considered, and (2) that the moratorium should be clarified to ensure the routine maintenance and repairs are not prohibited while the moratorium is in effect.

2. Nomination of Officers for 2011-2012

Commissioner Gaffney nominated Chair Doty for the Chair and Commissioner Nutsch nominated Commissioner Erickson for the Vice-Chair. The nominations were accepted by the respective nominees. The election will be conducted at the next meeting on June 15, 2011.

COMMUNICATION ITEMS

Chair Doty acknowledged receipt of the following:

1. Hearings Examiner's Report and Decisions.
2. Resolution No. 38264, adopted on May 17, 2011, concerning the Affordable Housing Policy Principles.
3. Substitute Ordinance No. 27981, adopted on May 24, 2011, establishing the Wedge Neighborhood Historic and Conservation Districts.
4. The City Council is seeking interested and qualified citizens to fill three positions on the Planning Commission, representing Council District No. 1 (West End and North End), Development Community, and Public Transportation, for a 3-year term from July 1, 2011 to June 30, 2014. Applications must be submitted to the Mayor's Office by June 10, 2011.
5. The Planning Commission is accepting applications for the amending the Comprehensive Plan and/or Land Use Regulatory Code for 2012. Applications must be submitted by Thursday, June 30, 2011.

COMMENTS BY LONG-RANGE PLANNING DIVISION

Ms. Donna Stenger provided some background information on Resolution No. 38264 concerning the Affordable Housing Policy Principles (Communication Item #2). She indicated that the City Council has requested the Planning Commission to incorporate said policy principles into the Comprehensive Plan and that the work will be included in the work program for the Planning Commission and the Long-Range Planning Division for 2012.

Ms. Stenger also reminded the Commissioners of the joint study session of the City Council and the Planning Commission scheduled for June 14, 2011 to discuss the Commission's recommendations on the proposed code changes concerning billboards as well as the billboard moratorium.

COMMENTS BY PLANNING COMMISSION

The Commissioners briefly commented on the three positions that will be vacated by Commissioners Elswick (District 1), O'Connor (Development Community), and Morris (Public Transportation). It was noted that, upon the expiration of their terms on June 30, 2011 and before their successors are appointed by the City Council, the three Commissioners are welcome to continue to serve on the Commission, although not required or obligated.

ADJOURNMENT

The meeting adjourned at 7:42 p.m.

Minutes

Tacoma Planning Commission

747 Market Street, Room 1036
Tacoma, WA 98402-3793
253-591-5365 (phone) / 253-591-2002 (fax)
www.cityoftacoma.org/planning

(For Review/Approval on July 6, 2011)

MEETING: Regular Meeting

TIME: Wednesday, June 15, 2011, 4:00 p.m.

PLACE: Room 16, Tacoma Municipal Building North
733 Market Street, Tacoma, WA 98402

Members Present: Thomas O'Connor (Vice-Chair), Donald Erickson (Vice-Chair-Elect), Chris Beale, Peter Elswick, Sean Gaffney (excused at 5:00 p.m.), Matthew Nutsch

Members Absent: Jeremy Doty (Chair), Scott Morris, Ian Morrison

Staff Present: Donna Stenger, Jana Magoon, Steve Atkinson, Brian Boudet, Chelsea Levy, Shanta Frantz, Karla Kluge, Lihuang Wung, Noah Yacker (Building and Land Use Services); Josh Diekmann (Public Works)

Vice-Chair O'Connor called the meeting to order at 4:05 p.m. The minutes for the meeting of May 18, 2011 were reviewed. Commissioner Erickson suggested a change to the first sentence of "Downtown Parking Requirements", as shown below:

> "Ms. Chelsea Levy stated that the Economic Development and Environment and Public Works Committees of the City Council have ~~instructed~~ requested the Planning Commission to assess parking-related barriers to new development."

The proposed amendment was accepted and the minutes were approved as amended.

GENERAL BUSINESS

1. Election of Officers for 2011-2012

Chair Doty and Commissioner Erickson were elected as Chair and Vice-Chair, respectively. Vice-Chair Erickson proceeded to preside over the remainder of the meeting.

2. Master Program for Shoreline Development

Mr. Stephen Atkinson provided an overview of the public testimony on the Shoreline Master Program Update received at the Planning Commission public hearing on June 1, 2011 and through the comment period ending on June 10, 2011. He distributed the written record and summary of oral testimony which had been bound together in a book for ease of use during review. The comments have also been posted online.

Most of the comments were regarding the S-7 and S-6 district boundaries, public access requirements, critical area buffer standards, zoning issues for the eastside of the Foss Waterway, including prohibitions of the expansion of existing industries. There also were comments regarding exemptions and non-conforming uses, environmental designations, as well as clarifications and cleanup items. Mr. Atkinson also highlighted the Department of Ecology's comments concerning marine buffer reductions, clarification of shoreline zoning and shoreline jurisdiction boundaries, and non-conforming use standards related to in-water structures.

The Commissioners requested that staff provide additional information in response to some of the comments. This included the cost of rehabilitation and oversight authority for Bayside Trails, the need for more visual aids for lay persons to better understand the public access requirements, further clarification on public access and legal constraints and the regulation of the ships at the Sperry Ocean Dock, and the trains along Schuster Parkway. The Commissioners also requested additional background information on the current prohibition of expansion of existing industry along the eastside of the Foss Waterway.

3. Critical Areas Preservation Ordinance (CAPO) Update

Ms. Karla Kluge reported on the status of the CAPO revisions and the last Focus Group meeting. City staff met with the Focus Group on Voluntary Restoration and Enhancement projects and proposed approaches designed to review, approve, and permit voluntary restoration and enhancement projects within the City on public and private land. The proposed approach is designed with three tiers that relate to project impact rather than project activity. The first tier, "Approved Activities", allows projects that will have no impact to occur without review and approval by the City as long as you meet the code parameters. The second tier, "Activities Approved with Staff Review", allows projects to occur with staff review and approval. Staff approval may include a written letter with conditional requirements. This approach is also based on impacts that are either minor or temporary and do not require compensatory mitigation. The second tier also breaks voluntary restoration into small individual projects and large-scale community projects. The third tier, "Programmatic Permits", requires written approval by the Land Use Administrator and contains compensatory mitigation for unavoidable impacts.

City staff have completed review of all topics with the Focus Group under the limited scope of topics approved by the Planning Commission. The Focus Group was generally in agreement with the proposed language and approach for voluntary restoration. During the meeting, two issues were discussed that remained under consideration. The first involved the 15% slope to 25% for removal of invasive species under the Approved Activities approach. The second issue related to the re-development and moving toward compliance vs. requiring full compliance with the new code. The example used was moving a trail away from the water's edge, but not being able to place it in the outer 25% of the buffer.

The Planning Commission did not support raising the 15% slope threshold as this relates to geotechnical erosion hazards and work completed is without any review. Ms. Kluge explained that through an innovative mitigation approach, moving the trail away from the water's edge is a preferred environmental alternative and an applicant can provide that justification under the current code and would be able to use a similar approach in the revised code. However, there is no guarantee without full review. Additional comments included definitions for "mechanical" and "pervious areas", setting programmatic permits to 5 years with easy renewal following review instead of outright 10-year approvals, locating wetland buffers with the help of City staff, mitigating hazard trees in ways other than removal, and new floodplain requirements.

4. Downtown Parking Requirements

In response to the Planning Commission's request made on May 18, 2011, Ms. Chelsea Levy provided additional information regarding the proposal to eliminate the minimum and maximum parking regulations for new development in the Downtown Commercial Core zone and the Historic and Conservation overlay districts.

Following a review of the proposal and the existing off-street parking regulations for downtown, Ms. Levy reported on the research compiled by herself and project team members from Building and Land Use Services, Noah Yacker and Shanta Frantz. The review of the research included explanations of how Tacoma's parking regulations compare to eleven northwest cities; how Tacoma's existing parking regulations have been applied in seven relatively recent residential and non-residential projects in downtown; and preliminary public feedback on the proposal. All project-related materials and background documents have been posted on the Planning Division's website at www.cityoftacoma.org/Planning, linked to "Downtown Code Update - Off-Street Parking Requirements", Ms. Levy stated.

In their discussion the Commissioners debated the implications of eliminating the parking minimums and maximums. Commissioners were divided on whether the maximums should be eliminated. Some Commissioners advocated that the market will determine the right amount of parking based on demand. Given the high cost of parking, developers will not over build parking unless there is a demand for more parking by the public. Alternatively, other Commissioners commented that downtown is a designated Regional Growth Center with adopted policies to take on additional growth while implementing strategies that reduce dependency on single occupancy vehicles. The Commission requested a further policy analysis to help guide the direction of their deliberations. Some Commissioners also expressed support for a request from the University of Washington Tacoma to expand the proposed boundary to include the entire campus footprint. Currently, the boundary bisects the campus.

Commissioners decided to continue their discussion of parking maximums and the boundary adjustment in July when the full Commission will be available to weigh in on the issues.

5. 2010-2011 Accomplishments and 2011-2012 Planning Activities

Ms. Donna Stenger reported that during July 2010 to June 2011, the Planning Commission has conducted twenty-three regular meetings and five public hearings and participated in a number of community meetings and functions. The Commission has made recommendations to the City Council on such major projects as the 2011 Comprehensive Plan Annual Amendment, billboard moratorium and code revisions relating to billboards, and the Wedge Neighborhood Historic

Special Review Overlay District and Conservation District. The Commission is also in the process of completing several major projects regarding the Shoreline Master Program Update, the Container Port Element, the Critical Areas Preservation Ordinance Update, and the Downtown Parking Requirements.

Ms. Stenger noted that the City's Mixed-Use Centers Update Project received the 2010 Governor's Smart Communities Awards, that the Complete Streets Design Guidelines received the 2010 American Planning Association and Planning Association of Washington Joint Awards, and that the Complete Streets Design Guidelines was recently ranked by the National Complete Streets Coalition as one of the top 15 in the nation among more than 200 state and local comparable policies. Both projects were completed under the direction of the Planning Commission, Ms. Stenger stated.

Ms. Stenger also briefly reviewed the scope of work for some of the projects the Commission would be involved in for the coming year. Those projects were grouped in the following categories:

- Mandated projects – Shoreline Master Program, Billboard Regulations, and 2012 Annual Amendment (including Urban Forestry, Affordable Housing Principles, on-premise digital signs, etc.).
- Grant obligations – Transfer of Development Rights (TDR), South Downtown/Brewery District Sub-Area Plan, and MLK District Sub-Area Plan & SEPA Planned Action.
- Projects committed and underway – Critical Areas Preservation Ordinance, Historic Preservation Code amendments, and Downtown Parking Requirements.
- Planned for initiation – Shoreline Public Access and Restoration Planning, and Parking Requirements for Commercial District Citywide.
- Projects under consideration – Affordable Housing Strategies, Implementation of Sustainable Tacoma Commission Priorities, and Old Town Historic District.

Ms. Stenger concluded by stating that the 2010-2011 Accomplishments and 2011-2012 Planning Activities report when finalized will be submitted to the City Council to fulfill the annual reporting requirement of the Planning Commission.

COMMUNICATION ITEMS

Vice-Chair Erickson acknowledged receipt of the following announcements:

1. Joint Study Session of City Council and Planning Commission regarding Billboards, June 14, 2011.
2. The Planning Commission is accepting applications for amending the Comprehensive Plan and/or Land Use Regulatory Code for 2012. Applications must be submitted by June 30, 2011.

COMMENTS BY LONG-RANGE PLANNING DIVISION

Ms. Stenger reported that the City Council adopted the 2011 Annual Amendments to the Comprehensive Plan and the Land Use Regulatory Code last night (June 14th). The Council

made a modification to what the Planning Commission had recommended for adoption, which was to clarify the applicability of design review within Conservation Districts. It is worth noting that there was only a small change during the Council's review process, as this was a very large undertaking. Ms. Stenger related that the Council was very pleased and impressed with the performance of the Planning Commission and the staff.

COMMENTS BY PLANNING COMMISSION

Commissioner Beale commended staff for compiling the 2010-2011 Accomplishments and 2011-2012 Planning Activities report, which was an excellent documentation of the work of the Commission and staff. The Commissioners concurred.

ADJOURNMENT

The meeting adjourned at 6:25 p.m.

Agenda Item GB-1

City of Tacoma
Community and Economic Development Department

TO: Planning Commission

FROM: Donna Stenger, Manager, Long-Range Planning Division

SUBJECT: Shoreline Master Program Update

DATE: June 30, 2011

On June 15th the Commission was provided with the public testimony on the draft Tacoma Shoreline Master Program. Staff presented a general summary of the public comment and discussed the Commission's work program to respond to comments and make a recommendation to the City Council on August 3rd.

On July 6th the Commission will begin reviewing the comments related to public access and critical areas issues. Joining staff for the discussion will be Tadas Kisielius, Partner in the firm GordonDerr, Betty Renkor, Shoreline Policy Lead for the Department of Ecology (DOE), Kathy Taylor, Senior Marine Ecologist for DOE, and Kim Van Zwalenburg, Project Officer for DOE. In support of this discussion, staff is providing the following materials:

1. A summary of comments received relating to public access and critical areas with preliminary staff responses;
2. A memorandum from Jay Derr of the firm GordonDerr relating to public access;
3. Background information on the Bayside Trail, including
    a. A GeoEngineer's study on the Schuster Slope where the Bayside Trails are located; and
    b. A summary of public comment from a public workshop on the Bayside Trail held on March 31, 2011 by City staff;
4. A memorandum from Teresa Vanderburg of Environmental Science Associates (ESA) providing background information on the marine buffer standards in the existing Tacoma Municipal Code;
5. A memorandum from Teresa Vanderburg of ESA, from 2008, summarizing the Best Available Science (BAS) that was developed in support of the City's critical areas preservation ordinance; and

In addition, the Commission may want to review the oral summary and written comments as submitted on the above two issues that are referenced in the attached draft summary of comments and responses. These can be found in the public testimony book. If you have any questions, please contact Stephen Atkinson at 591-5531 or satkinson@cityoftacoma.org.

DS:sa

c. Peter Huffman, Assistant Director

Attachments (6)

6.4 Marine Shorelines and Critical Areas Protection

Source Key	Page	Section	Commenting Agency	Name of Commenter	Comment	Response to Comment
A.9, B.33			Schnitzer Steel	Mackie	Critical areas standards do not require Best Available Science because SMA test is no net loss.	Staff concurs. While the GMA requires critical area standards to be based on the Best Available Science (BAS) the Shoreline Management Act requires jurisdictions to review scientific and technical information. The WAC guidelines state that the City is to: **WAC 173-26-201 (2) (a):** • "identify and assemble the most current, accurate, and complete scientific and technical information available that is applicable to the issues of concern" • "base master program provisions on an analysis incorporating the most current, accurate, and complete scientific or technical information available." The Shoreline Inventory and Characterization Report establishes baseline shoreline conditions and includes documentation of the most "current, accurate and complete"

						scientific and technical information.
A.9, B.33			Schnitzer Steel	Mackie	Marine waters should not be considered critical areas by virtue of being marine waters, but only when specifically defined critical areas are present as determined by the City.	Staff concurs. Engrossed House Bill 1653 clarifies that shorelines of the state shall not be considered critical areas except to the extent that specific areas qualify for critical area designation based upon the definition of critical areas in the RCW. The City of Tacoma Shoreline Inventory and Characterization identifies existing and probable critical areas within the City's shorelines of the state. The draft TSMP provides standards for the following critical areas within the City's shorelines: • Wetlands • Streams and Riparian Habitats • Fish and Wildlife Habitat Conservation Areas • Geologically Hazardous Areas In addition, WAC 173-26-201 (2) (C) requires the City to establish standards that protect ecosystem-wide processes and functions, and (d) requires the City to reserve shoreline areas for protecting and restoring functions. Marine shoreline buffer standards are proposed consistent with the WAC cited above, the findings and management recommendations within the Inventory and Characterization Report, and consistent with "the most current, accurate, and complete scientific and technical information that is available that is applicable to

						the issues of concern," to protect the ecosystem-wide processes that underpin the shoreline functions necessary to support priority species that are present within the City's marine shoreline and to assure that new use and development within the shoreline achieves no net loss of ecological functions. It is also important to note that WAC 173-26-201 applies mitigation sequencing to all uses and development within the shoreline. Meeting the buffer standards would be one means to achieve avoidance of impacts. Staff recognizes that these are complex issues and will discuss these issues with the Planning Commission on July 6th.
B.36			Simpson	McEntee	Opposed to buffer revisions. Would like section 6.4.3.c.1 to read "the standard buffer is eliminated for water-dependent development to allow direct water access"	Staff does not recommend a change. This change would have a significant impact on the City's ability to determine whether a proposed use or development is achieving no net loss. Additional analysis and site and project specific evaluation is required when a new use or development locates within a marine buffer, including water-dependent and public access. Stating that water-dependent uses are not subject to the buffer standards, or that the buffer is eliminated, may jeopardize the City's

						ability to require this information.
B.28		6.4.2.B1.a	Port of Tacoma	Jordan	State that buffer can be reduced to 0 for water-dependent uses when operationally necessary	Stated in 6.4.2.B.1.a
A.36, B.40			People for Puget Sound and Futurewise	Trim	Wetland buffers should be bigger, not protective enough or consistent with science and with Department of Ecology recommendations.	In 2004, GeoEngineers prepared a BAS review for all the city's critical areas (Report, Best Available Science Review, City of Tacoma, Critical Areas Preservation Ordinance, Tacoma, Washington, June 15, 2004). The City proposed wetland buffer standards consistent with the BAS review and in accordance with wetland buffer alternatives guidance from Department of Ecology. On November 15, 2005, the City of Tacoma adopted amendments to Tacoma Municipal Code (TMC) Chapter 13.11 Critical Areas Preservation as required by the Growth Management Act. The City's adopted standards for wetlands were not appealed at that time. The buffer standards under TMC 13.11 have been incorporated into the draft TSMP. At this time the Department of Ecology has not expressed concern that the proposed buffer standards are not protective enough or are inconsistent with Department of Ecology guidance. According the City of Tacoma's Inventory and Characterization, there are few existing or probable wetlands within the City's shoreline

						jurisdiction. Known wetlands include Titlow lagoon and Wapato Lake.
A.36			People for Puget Sound and Futurewise	Trim	Include statement that buffers must be intact in order to serve the avoidance and minimization functions	The draft TSMP does not require that buffers be re-vegetated in order to perform the avoidance and minimization functions. Meeting buffer standards, even when the buffer is degraded, can perform avoidance and minimization functions. However, there may be circumstances where the appropriate mitigation for impacts would be a re-vegetated portion of the buffer area.
B.40			Futurewise	Patterson	West slope and marine view drive should have 200-foot buffers	Staff will review and discuss with the Planning Commission on July 6th.
B.50			DOE	Van Zwalenburg	Buffer reductions for water-related and – enjoyment uses down to 25' require greater refinement. Are too liberal as currently proposed. A reduction of more than 25% should require a shoreline variance.	The draft TSMP allows water-related and water-enjoyment uses in all of the City's shorelines to reduce the buffer, with mitigation sequencing, to a minimum of 25' from OHWM. In some areas of the shoreline, including the port tideflats, this amounts to a 50% reduction. In other shoreline areas it could be as great as 87%. Staff recommends utilizing a reduction based on maximum percentage, rather than a minimum width, so that the bottom line setback would be determined in proportion to the size of the standard buffer width. This would result in areas with greater existing functions having a more protective buffer standard. In addition, further reductions are currently allowed through a shoreline variance.

						Staff will prepare further discussion on this issue for the Planning Commission meeting on July 6th.
B.40		6.4.2.C.1 and 2	Futurewise	Patterson	Remove reference to buffer reduction.	Staff will review and provide a recommendation.
B.40			Futurewise	Patterson	Do not allow buffer reduction for water-enjoyment uses.	Water-enjoyment uses are a preferred use and inherently require a location in proximity to the shoreline to meet the definition of water-enjoyment. Disallowing buffer reductions for water-enjoyment uses could potentially result in significant new non-conforming uses and would run contrary to the community's vision for the shoreline. However, staff also recognizes that water-enjoyment uses do not require direct shoreline access and should be set back from the shoreline to protect and preserve ecological functions.
B.50			DOE	Van Zwalenburg	Clarify buffer reduction provisions for marine shorelines, wetlands and streams	Staff recommends providing language that explains how the critical areas chapter is organized so that the relationship between different sections is clearer.
B.50	Page 137	6.4.6 (E)	DOE	Van Zwalenburg	Why is 50% setback reduction allowed for stream buffers and not for other buffer requirements?	Staff will review and provide clarification.
B.19			Puget Creek Restoration Society	Hansen	Ensure that compensatory mitigation from impacts remains in the same location as the impacts	WAC 173-26-201 establishes the hierarchy for mitigation sequencing and requires that preferential consideration be given to compensatory mitigation actions that replace the impacted functions directly and in the immediate vicinity. The WAC does provide some flexibility for alternative strategies.

						The draft TSMP establishes compensatory mitigation preferences based upon the designation. For example, Urban-Conservancy areas would have a preference for compensatory mitigation that is on-site or within the same reach or sub-basin, whereas High Intensity areas provide greater flexibility for innovative mitigation in areas that would achieve greater functional lift than a strict on-site or in-reach requirement might achieve.
B.40			Futurewise	Patterson	Ensure the term “mitigation” include first avoidance and minimization. Differentiate from compensatory mitigation.	Staff concurs. Section 6.4.2 (C) of the draft TSMP establishes mitigation sequencing that requires that new use and development first avoid and minimize impacts. Compensatory mitigation is the final step in mitigation sequencing.
B.40			Futurewise	Patterson	Intact buffers should not be disturbed. Redevelopment or expansion into buffers should require enhancement as compensatory mitigation.	Chapter 6.6 Vegetation Conservation establishes standards to preserve and protect existing shoreline vegetation. Preferred uses are allowed in some circumstances to locate within an intact buffer but mitigation is required to achieve no net loss of functions. Areas with the most significant intact functions have been designated Natural for the utmost protection.
B.50	Page 130	6.4.5 (C)(4)	DOE	Van Zwalenburg	FIL would need to demonstrate NNL	Staff concurs.
B.44		6.4.2.C.4	CHB	Rose	Amend the current draft to allow for FIL, but implement only a reviewed and adopted formal FIL	Fee in lieu sites could be established by either public or private entities. The City, at this time, does not have a formal fee in lieu site. Until such time as a formal site is established fee in

						lieu would not be an option for mitigation. Staff will provide clarifying text changes.
B.29			Citizen	Joy Keniston-Longrie	Supports habitat FIL	Support noted.
B.28		6.4.2.B.3 and 6.4.3C	Port of Tacoma	Jordan	Port appreciates amendment to this section	Comment noted.
B.19			Puget Creek Restoration Society	Hansen	Spread habitat restoration throughout nearshore	Staff will review the science on this issue and provide a recommendation.
B.28		6.4.5.H.2.b	Port of Tacoma	Jordan	Add: “or as otherwise amended” to end of sentence	Staff concurs.
B.28, B.40			Port of Tacoma, Futurewise	Jordan, Patterson	Typo: Table 6-5 “1:5:1”	Comment noted. Staff will correct.
B.50	Page 119	6.4.2(3)	DOE	Van Zwalenburg	Rewrite section to be consistent with RCW 90.58.580 and allow relief from standards and use regulations when a shoreline restoration project results in a landward shift in the OHWM	Staff concurs
B.50	Page 121	6.4.2 (C)(3)(c)	DOE	Van Zwalenburg	How will voluntary restoration projects initiated since 2006 be implemented?	Staff will review and provide clarification.
B.50	Page 124	6.4.3 (B)(2)(b)	DOE	Van Zwalenburg	replace “modification” with “development” or “shoreline modification”	Staff concurs
B.50	Page 133	6.4.5 (I)	DOE	Van Zwalenburg	Table labeling error; two tables labeled 6-4, on pages 129-130 and page 134	Staff concurs
B.50	Page 138	6.4.6 (G) (1)(k)	DOE	Van Zwalenburg	references Section 2.4.1 but should be Section 2.4.2	Staff concurs
B.50	Page 141	6.4.7 (C)(1)(d)	DOE	Van Zwalenburg	required clarification	Staff will review and provide clarification.
B.50	Page 143	6.4.7 (D)(2)(m)	DOE	Van Zwalenburg	Why include reference to 13.11 instead of directly including language?	The standards for geologically hazardous areas have been incorporated directly into the draft TSMP. These specific citations are to sections of TMC 13.11 that address information and analysis requirements for the erosion and landslide hazard

						technical report. Staff determined that these information requirements were not directly implementing WAC standards and could therefore be referenced. However, staff will review and make a recommendation as to whether these requirements can be incorporated directly into the TSMP.
B.44		6.4.1.1	CHB	Rose	Add: "…equal or greater than that provided for under the City of Tacoma's Critical Areas Ordinance (CAO), TMC 13.11…"	Staff will review. However, it should be noted that State law no longer requires equivalency between critical areas standards under GMA and those regulated under SMA. The bottom line standard for shoreline critical areas is no net loss of ecological functions.
B.44		6.4.3.B.2	CHB	Rose	Edit to exclude the requirement for native shoreline vegetation in the S-15 because of potential damage to the impermeable cap	6.4.3.B.2 does not mandate that shoreline buffers be restored or re-vegetated as a condition of use.

6.5 Public Access

Source Key	Page	Section	Commenting Agency	Name of Commenter	Comment	Response to Comment
A.16,			Citizen	Christophersen,	Do not decrease public access	New development that obstructs, displaces, or decreases existing public access would be required to mitigate for those impacts and replace the access elsewhere. This is an instance where the City could demonstrate nexus.
B.19, B.51			Puget Creek Restoration Society, Citizen, Citizen	Hansen, Veek	Supports public access to the shoreline as long as this does not degrade or impact sensitive shoreline habitat.	Comment noted. Public access within the shoreline is required to meet no net loss standards.
A.2, A.3, A.4, A.6,			Tacoma-Pierce County	Murray, Fox, Elliot, Coy, Boyle,	Public access requirement is unclear - opposes requirement	Comment noted. Staff recommends some clarifying text changes and

A.10, A.13, A.14, A.18, A.24, A.32, B.7, B.17, B.27, B.36			Chamber, QVAKM Real Estate, Brotherhood of Locomotive Engineers, Sperry Ocean Dock, Grette Associates, International Longshore and Warehouse Union Local 23, Tacoma Fire Fighters IAFF Local 31, Youth Marine Foundation, Citizen, Temco and BNSF Railway, Brown and Haley, Temco	Mason, Baurichter, Lonergan, Lucas, Stauffacher, Clair, Finn, Johnson, McEntee		reorganization of the Chapter to better delineate when access is required, and if so, which standards apply.
A.21, A.26, A.33, B.7, B.11, B.14, B.42, B.43, B.47, B.49			Citizen, Citizen, Citizen, Brown and Haley, Citizen	Teitge, McGovern, Schain, Clair (Pierson), Coleman, Crowly, Rietmann, Rose (Richard), Stirn, Teitge	Opposes relying on Bayside Trail for public access. Trail is not universally accessible, has sensitive landscape features and safety concerns.	Opposition noted. The draft TSMP and Public Access Alternatives Plan identifies a 'package' of public access projects for the S-7 Shoreline District. The Bayside Trail is identified as one of those options, but only when it has been determined that on-site access is infeasible and a waiver has been granted. When access is required, the preference in the draft TSMP is for the installation of a 15' walkway, ADA compliant, and adjacent to the ordinary high water mark. If this preference is infeasible or

						disproportionate to the established nexus, then an alternative on-site access feature, such as a view point, is preferred prior to allowing off-site mitigation. When an applicant is required to provide off-site access, the TSMP requires that that access go towards the implementation of one of the identified projects, including Bayside Trail improvements, the Schuster Parkway Multimodal Trail, improved connections between Bayside Trail and Schuster Parkway, or a pedestrian flyover. The implementation or existence of one access site/project does not outright exempt new uses or development from providing additional access improvements, but may be considered when the Land Use Administrator is evaluating a proposed use or development for nexus and proportionality. Staff will discuss this issue further with the Planning Commission on July 6th.
B.9			Citizen	Clifford	Supports public access to a continuous waterfront bike/pedestrian path around the east and west sides of Thea Foss Waterway, just south of Murray Morgan bridge.	Comments noted. The draft TSMP would require continuous public access from the Foss Waterway to Point Defiance, adjacent to the shorelines edge. However, these requirements are subject to nexus and proportionality tests and therefore, for private uses in this area, the burden
B.3			Bellarmine Preparatory School	Birmingham	Supports continuous walkway/bike path along east and west sides of the Thea Foss Waterway.	
B.3			Bellarmine	Birmingham	Supports a minimum 20-foot wide easement	

			Preparatory School		along the east side of Thea Foss Waterway south of Murray Morgan Bridge and along the west side of Thea Foss Waterway south of Dock Street to Point Defiance Park, as well as an elevated walkway through the Temco Prop.	would rest on the City to determine 1. that a nexus exists to require access mitigation, and 2. that the public walkway is proportional.
B.7			Brown and Haley	Clair (Pierson)	Require properties in the Foss, Schuster and Ruston to provide contiguous waterfront walkway linkage with adjacent properties.	If the preferred access alternative, a public walkway adjacent to OHWM, is disproportionate or infeasible, other alternatives would be required including off-site mitigation consistent with the PAAL or a contribution to an established public access fund.
B.22			Walk the Waterfront	Herrmann	Request that all new development in the S-7 provide public access walkway along the entire site's shoreline include water-oriented port and industrial uses	
A.1, A.27, A.21, A.19, A.20, A.31, A.33, B.1, B.3, B.7, B.9, B.15, B.18, B.20, B.22, B.23, B.29, B.37, B.45, B.46, B.47, B.49, B.51, B.52 B.39			Citizen, Walk the Waterfront, Greater Metro Parks Foundation, Citizen, Citizen, Citizen, Bellarmine Preparatory School, Citizen, Tacoma Design Collaborative, RE/MAX Professionals, Citizen, Walk the Waterfront, Tacoma Audobon, Citizen	Lampson, Herrmann, Teitge, Clair (Sara), Rietmann, Singh, Schain, Anderson, Birmingham, Clifford, DeDominicis, Grunberg, Heaton, Herrmann, Hillman, Keniston-Longrie, McGovern, Rose (Richard), Schain, Singh, Stirn, Teitge, Veek, Wissmer, Nordquist	Supports continuous bike path/walkway from Point Defiance to LeMay Museum/Tacoma Dome.	
A.9 , B.36			Schnitzer Steel, Simpson	Mackie, McEntee	SMA does not require public access as condition of shoreline permit – requirement	The SMA does not universally require public access as a condition of a

					not consistent with Guidelines	shoreline development permit. However, it does establish the promotion and enhancement of public access and enjoyment of the shorelines as one of the overarching policies of the State. The SMA states that: ***RCW 90.58.020:*** *"[T]he public's ability to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally."* *"Alterations of the natural conditions of the shorelines of the state, in those limited instances when authorized, shall be given priority for …development that will provide an opportunity for substantial numbers of people to enjoy the shorelines of the state."* In addition, the SMA does provide a mandate for public agencies and development that occurs on public lands to provide public access. The implementing WAC Guidelines also mandate that local jurisdictions seek to enhance public access opportunities and establish standards for public access on a permit by permit basis. Local jurisdictions are
A.32			Temco and BNSF Railway	Stauffacher	Should not use zoning to force public access	
A.40			Narrows Marina	Wagner	Opposes public access requirements on a permit by permit basis	
B.5			ConocoPhillips	Jeffrey Callender	Opposes public access requirement because on site access is not possible and operations do not create demand for access.	

						required to implement specific standards, including: ***WAC 173-26-221(4): "…****The master program should seek to increase the amount and diversity of public access to the state's shorelines consistent with the natural shoreline character, property rights, public rights under the Public Trust Doctrine, and public safety.* *Require that shoreline development by public entities, including local governments, port districts, state agencies, and public utility districts, include public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment…* *Provide standards for the dedication and improvement of public access in developments for water-enjoyment, water-related, and non-water-dependent uses and for the subdivision of land into more than four parcels…* *Adopt provisions, such as maximum height limits, setbacks, and view corridors, to minimize the impacts to existing views from public property or substantial numbers of residences..."*
B.33, A.9,			Schnitzer Steel,	Mackie, Johnson,	Burden of establishing nexus is on the City	Staff concurs. The burden of

B.27, B.38			Tacoma-Pierce County Chamber	Murray,		establishing nexus is on the City. However, nexus is a protection against the taking of private property and as such is limited to instances where the applicant is a private use on private lands. Nexus does not apply to use and development that occur on public lands. Staff recommends text changes to differentiate between public and private projects and to clearly articulate that the burden is on the City to establish nexus.
A.11, B.27			Conoco Phillips, Temco	Callendar, Johnson	Opposes public access requirements of Draft SMP	Opposition noted.
B.28			Port of Tacoma	Jordan	6.5.2.A.3.e: Exempt water-dependent uses related to terminal development on Port-owned property.	The Shoreline Management Act and WAC Guidelines mandate that projects on public property provide public access unless the project can meet on e of the waiver criteria for on-site access. These requirements apply to all uses and development on public properties including water-dependent uses. If a Port project meets a waiver criteria access can be provided on-site or via a public access fund contribution. Staff does not recommend making a change at this time. However, the Commission could consider the underlying access preference of on-site versus off-site implementation. Staff will discuss this further with the Planning Commission on July 6th.
B.24			Master Builders Association of Pierce County	Hoey	Opposes public access requirement for 4 or more lots or units (reference 7.7.1 A-7)	Staff does not recommend a change. WAC 173-26-221 (4) (d) (iii) specifically requires that access be required for developments meeting

						these criteria.
A.22			Citizen	Coleman	No need for public access in S-10	The Public Access Alternatives Plan (PAAL) is a City-wide vision for a public access system that supports a broad variety of access and recreation opportunities. Identified projects are not limited to the S-6 to S-8 shoreline area but also include trail systems in the bluffs adjacent to the Tacoma Narrows and Marine View Drive, a Puyallup River Levy Trail, and recreation improvements at Wapato Lake. The PAAL identifies existing public access in the S-10 Shoreline District but does not identify substantial new public access projects within that area. While some opportunities may exist to provide habitat viewing opportunities, access projects have been prioritized in areas outside the S-10 where conflicts between access and port, terminal and industrial operations will be avoided. However, the draft TSMP does apply a universal preference that access first be provided on-site unless there is a substantiated public safety or security risk. In response to the comments, the Planning Commission could consider devising different access preferences for different shoreline districts or per a specific type of use, or the
A.20			Citizen	Rietmann	Do not require public access for E Foss and Port/Industrial area	
A.32, B.6			Temco and BNSF Railway	Stauffacher, Christophersen	Opposes on-site public access for industrial uses	
A.23			Citizens for a Healthy Bay	Rose (Leslie)	A diversity of public access should be provided, not just a walkway along the S-6 to S-8 shoreline.	
A.12			Port of Tacoma	Jordan	Foss Esplanade should end at E 15th St	
B.39			Tahoma Audubon	Veeck	Provide access outside of the industrial shorelines	

						Commission could revise the planned public access project list and maps. Staff will provide further discussion with the Planning Commission on July 6th.
B.28		6.5.2.D.2	Port of Tacoma	Jordan	Parcel 8950000720 makes boundary E 7th Street. Port would like Boundary E 15 street.	Staff will review and provide clarification on this issue.
B.33		3.8.2	Schnitzer Steel	Mackie	Amend goal to provide that "maximum extent feasible where both safe and does not interfere with water dependent industrial and commercial activities."	Staff will review.
A.14			Tacoma Fire Fighters IAFF Local 31	Baurichter	Temco and Sperry are not safely compatible with on-site public access	Public access standards include waiver criteria for on-site public access when there is a demonstrable public safety or security concern. Applicants are required to submit substantial, credible evidence to support the waiver request. If granted, access mitigation would be required off-site or through a public access fund contribution.
A.29, A.32			Martinac Shipbuilding	Martinac, Stauffacher	Concerned with safety of public access in industrial areas	
A.11			Conoco Phillips	Callendar	Homeland security requirements would not allow public access	
A.22, B.43			Walk the Waterfront	Herrmann, Rose	Burden to prove on-site access is not possible should be on applicant	
A.27			Walk the Waterfront	Herrmann	Supports stronger waiver criteria for onsite public access	
A.29, A.30			Martinac Shipbuilding, Simpson Companies,	Martinac, McEntee	Concerned over impacts from adjacent uses (public access, nonindustrial uses)	Comment noted. Policy 6.5.1(10) requires that new public access be sited and appropriately designed to avoid causing detrimental impacts to the operations of existing water-dependent and water-related uses. Staff recommends adding an implementing regulation.
A.5, B.22, B.30, B.41, B.11. B.23, B30			Schroedel Planning Services, Walk the Waterfront, Citizen	Schroedel, Herrmann, Lane, Price, Coleman, Hillman, Lane	Opposes "automatic" exemptions from public access requirements or variances, waivers or other means of disallowing public access on site to the waterfront of S-6, S-7 and S-8 (6.5.1.9 and 6.5.2.A.7.	Opposition noted. The Draft TSMP does not allow for an "automatic" exemption. However, the burden would rest with the City to determine that a nexus exists to require public

						access for new private uses and development. However, all uses and development will be reviewed for potential impacts to public access or other conditions that would substantiate a nexus.
A.5, A.27, B.16, B.22, B.29, B.30, B.41, B.51			Schroedel Planning Services, Walk the Waterfront, FWDA, citizen, Tacoma Audobon	Schroedel, Herrmann, Dowie, Keniston-Longrie, Lane, Price, Veek	Supports the use of FIL for public access when on-site access cannot be accomplished. Continue to refine plan.	Support noted
B.43			CitizemB.43	Rose (Richard)	Require payment equal to 5% of project cost to FIL if on site access is not possible.	In order to demonstrate proportionality, the FIL contribution would have to be site and project specific and based upon the demonstrated nexus and reasonable mitigation. A flat percentage based fee may in some circumstances be disproportionate.
B.17			BNSF	Finn	Oppose FIL. Industrial and exempt uses should not be required to contribute to FIL.	Opposition noted.
B.33, A.9, B.27, B.33, B.38, B.43			Schnitzer Steel, Grette Associates, Tacoma-Pierce County Chamber	Mackie, Johnson, Murray, Rose (Richard)	For FIL, City must identify a demonstrated need for additional public access caused by the project and the fee must be commensurate with size and scale of demand.	Comment noted. For private projects, the City bears the burden of establishing nexus. This applies to the FIL as well. When an applicant is required to provide public access (a nexus has been established) and it has been determined through the waiver criteria that access cannot be accommodated on-site, the applicant would have the option to make a contribution to a City of Tacoma public access fund for the development of public access projects elsewhere, as opposed to meeting the
A.10, B.38				Boyle, Murray	Fee in lieu requirement is unclear.	

						requirement on-site or off-site. The appropriate contribution would be a site and project specific determination, contingent upon a number of factors, including an assessment of rough proportionality.
A.32	102		Temco and BNSF Railway	Stauffacher	The term reasonably disproportionate is unclear	Proportionality is a situational and project specific determination. There is not a clear bright line for what constitutes 'rough proportionality." The test is one of reasonableness.
B.4			Chamber of Commerce	Brackett	Note: reference 6.5.2(A)(7) in Shoreline Public Access Plan Revised Draft pages 41-42 does not exist.	Staff will correct.
B.22			Walk the Waterfront	Herrmann	Various wording changes to 6.5.2 including changing "non-water-oriented" to "non-water-dependent" and clarification that access be provided in S-15 in front of new development.	6.5.2 (B) requires that new development within the S-15 provide access along the entire site's shoreline. Staff could clarify that this means adjacent to the OHWM. In addition, 6.5.2 (10) and (11) require water-enjoyment uses and non-water-oriented uses to provide continuous public access between the use and the shoreline edge. Staff will review other suggested word changes.
B.28		6.5.1.2	Port of Tacoma	Jordan	Add exception for water-dependent and water-related uses.	Consistent with WAC 173-26-221(4)(d) all uses and development, even water-dependent uses, are required to minimize impacts to views from public properties and a significant number of residences. However, the WAC is also clear that when there is an irreconcilable conflict between a water-dependent use and adjoining views, the water-dependent use shall have priority.
B.28		6.5.2.A.2	Port of Tacoma	Jordan	State that where water-dependent use and	This is stated in 6.7.2 (A) (7). Staff

					visual access conflict water-dependent use prevails	recommends stating this in 6.5 as well.
B.28		6.5.2A.16	Port of Tacoma	Jordan	The Port prefers the ILA process and would like TSMP section to be consistent with PAAL.	Staff will review for consistency.
B.50	Page 152	6.5.2 (C)(2)	DOE	Van Zwalenburg	Consider rewording to say “off-site improvements shall be accomplished that help implement one of the following…”	Staff concurs.
B.50	Page 152	6.5.2(D)	DOE	Van Zwalenburg	References TSMP 6.5.2 is reference 6.7.2?	Staff will correct.

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MEMORANDUM

TO: Tacoma City Council

FROM: Jay Derr
GordonDerr, LLP

DATE: February 8, 2011

RE: Tacoma Shoreline Master Program Update
Public Access Overview

This memorandum briefly summarizes the legal framework for public access requirements in the City of Tacoma Shoreline Master Program update (SMP). Public access requirements in the SMP must be developed taking into consideration the following: (1) the Public Trust Doctrine, (2) the Shoreline Management Act (SMA) and Ecology Guidelines, (3) constitutional limitations (especially nexus and rough proportionality), and (4) potentially, the limitations found in RCW Chapter 82.02.

1. Public Trust Doctrine

In a nutshell, the "public trust doctrine" recognizes the public's overriding interest in navigable waterways and protects public ownership interests in certain uses of navigable waters and underlying lands, including navigation, commerce, fisheries, recreation, and environmental quality. While this doctrine of law protects public use and access rights in the public waters of the state below the ordinary high water mark, it does not, in and of itself, establish public rights to access across private lands above the ordinary high water mark.

2. SMA and Ecology Guidelines

The SMA and Ecology guidelines clearly indicate that public access is a desired and favored use. However, the SMA and the Ecology Guidelines recognize that the City's ability to impose conditions requiring public access may be constrained by Constitutional and statutory limitations discussed below.

Specific requirements of the SMA and Ecology Guidelines related to public access include the following:

- Public access planning. The SMA requires the City to prepare a public access element in its SMP that identifies specific public needs and opportunities to provide public access.

- Public access is both physical and visual. The Ecology Guidelines clarify that public access includes not only physical but also visual access to the shorelines.

- Property rights. Both the SMA and the Ecology Guidelines recognize that public access must be provided within the confines of constitutional and other legal limitations that protect private property rights.

- Public access to public shorelines. The SMA and the Ecology Guidelines generally require the City to plan for and "increase" public access to publicly-owned shorelines.

- Public access included in shoreline development by public entities. The Ecology Guidelines state that the City should require shoreline development by public entities to include public access measures as part of each development project, with exceptions where the access would be incompatible with the public project due to reasons of safety, security, or impact to the shoreline environment and the City's public access planning identifies more effective public access through alternative means or locations.

- Public access to private shorelines. The Ecology Guidelines also suggest that public access to privately-owned shorelines should generally be required "in developments for water-enjoyment, water-related, and non-water-dependent uses and for the subdivision of land into more than four parcels." However, the Guidelines recognize that this private shoreline access requirement must be tempered with consideration of "constitutional or other legal limitations," and also provide for exceptions where public access to private shorelines is infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment.

Relevant excerpts from the SMA and Ecology guidelines are attached to this memorandum as **Appendix A** and **Appendix B**.

3. Constitutional Limitations

The most critical constitutional limit on development conditions requiring public access is the doctrine of "regulatory takings," which requires local government to show a "nexus" and "rough proportionality" for such conditions (also known as the "Nollan/Dolan" analysis). These principles, which originated under a federal constitutional takings analysis have similarly been applied in a Washington constitutional context:

- Nexus. The City must show that an "essential nexus" exists between a legitimate state interest and the permit condition. The focus here is on the nature of the permit condition and the need to show that its nature is related to an adverse impact of the proposed development.

- Rough proportionality. The City must show that the degree of the exactions demanded by the permit conditions bears the required relationship to the projected impact of the proposed development. The focus here is on the degree of the permit condition and the need to show that its degree is related to the extent of the adverse impact.

A few practical applications may help illustrate these concepts as applied to private shorelines:

- If a private project proposes to remove or impact existing public access (physical or visual), then the City can probably impose a condition related to public access to mitigate this impact to a degree similar to the impact to existing public access that is created by the proposed project.

- If a private project increases the demand for public access to shorelines, then the City can probably impose a condition related to public access to mitigate this impact, again, to a degree that is proportional to the amount of increased demand.

- If a private project impacts navigability (the public trust doctrine), then the City may be able to impose a condition related to public access to mitigate this impact if the City can show that the access condition is reasonably tailored to preventing impairment of the public's interest in navigability. This link between navigability and upland public access is probably one of the most difficult to establish and, as such, the City would want to proceed carefully and on a case-by-case basis to evaluate nexus and proportionality.

Public access conditions may raise other constitutional issues, such as substantive due process and equal protection, but the takings evaluation outlined above typically addresses most issues related to public access. A publication providing guidance on these and other legal issues has been produced by the Washington Attorney General's Office. Public access policies and regulations proposed by the City should be evaluated under the takings framework described in the Attorney General Guidance to satisfy the requirements of RCW 36.70A.370.

4. Statutory Limitations on Exactions under RCW 82.02.020

RCW 82.02.020 provides another limit on the City's ability to require dedications of land or easements, and Washington courts have often applied this statutory analysis in lieu of the constitutional nexus/rough proportionality analysis discussed above, when evaluating local land use regulations. This statute only permits exactions that are "reasonably necessary as a direct result of the proposed development or plat"). However, this statutory limitation may not apply to local shoreline plans and regulations because they are considered to be state requirements, which are not subject to RCW 82.02.020. This issue is pending review before the State Supreme Court.

APPENDIX A

Excerpts from Shoreline Management Act, RCW Chapter 90.58

RCW 90.58.020:

The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. In addition it finds that ever increasing pressures of additional uses are being placed on the shorelines necessitating increased coordination in the management and development of the shorelines of the state. The legislature further finds that much of the shorelines of the state and the uplands adjacent thereto are in private ownership; that unrestricted construction on the privately owned or publicly owned shorelines of the state is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest. There is, therefore, a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines.

It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.

The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

(1) Recognize and protect the statewide interest over local interest;

(2) Preserve the natural character of the shoreline;

(3) Result in long term over short term benefit;

(4) Protect the resources and ecology of the shoreline;

(5) Increase public access to publicly owned areas of the shorelines;

(6) Increase recreational opportunities for the public in the shoreline;

(7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible

consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. Alterations of the natural condition of the shorelines and shorelands of the state shall be recognized by the department . . .
(emphasis added)

RCW 90.58.100

(2) The master programs shall include, when appropriate, the following:

(a) An economic development element for the location and design of industries, projects of statewide significance, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state;

(b) A public access element making provision for public access to publicly owned areas;

(c) A recreational element for the preservation and enlargement of recreational opportunities, including but not limited to parks, tidelands, beaches, and recreational areas;

(d) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element;

(e) A use element which considers the proposed general distribution and general location and extent of the use on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land;

(f) A conservation element for the preservation of natural resources, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection;
(emphasis added)

APPENDIX B

Excerpts from Ecology Guidelines, WAC Chapter 173-26

WAC 173-26-221, General master program provisions.
The provisions of this section shall be applied either generally to all shoreline areas or to shoreline areas that meet the specified criteria of the provision without regard to environment designation. These provisions address certain elements as required by RCW 90.58.100(2) and implement the principles as established in WAC 173-26-186.

[...]

(4) ***Public access.***

(a) **Applicability.** Public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. Public access provisions below apply to all shorelines of the state unless stated otherwise.

(b) **Principles.** Local master programs shall:

(i) Promote and enhance the public interest with regard to rights to access waters held in public trust by the state while protecting private property rights and public safety.

(ii) Protect the rights of navigation and space necessary for water-dependent uses.

(iii) To the greatest extent feasible consistent with the overall best interest of the state and the people generally, protect the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the state, including views of the water.

(iv) Regulate the design, construction, and operation of permitted uses in the shorelines of the state to minimize, insofar as practical, interference with the public's use of the water.

(c) **Planning process to address public access.** Local governments should plan for an integrated shoreline area public access system that identifies specific public needs and opportunities to provide public access. Such a system can often be more effective and economical than applying uniform public access requirements to all development. This planning should be integrated with other relevant comprehensive plan elements, especially transportation and recreation. The planning process shall also comply with all relevant constitutional and other legal limitations that protect private property rights.

Where a port district or other public entity has incorporated public access planning into its master plan through an open public process, that plan may serve as a portion of the local government's public access planning, provided it meets the provisions of this chapter. The planning may also justify more flexible offsite or special area public access provisions in the master program. Public participation requirements in WAC 173-26-201 (3)(b)(i) apply to public access planning.

At a minimum, the public access planning should result in public access requirements for shoreline permits, recommended projects, port master plans, and/or actions to be taken to develop public shoreline access to shorelines on public property. The planning should identify a variety of shoreline access opportunities and circulation for pedestrians (including disabled persons), bicycles, and vehicles between shoreline access points, consistent with other comprehensive plan elements.

(d) **Standards.** Shoreline master programs should implement the following standards:

(i) Based on the public access planning described in (c) of this subsection, establish policies and regulations that protect and enhance both physical and visual public access. The master program shall address public access on public lands. The master program should seek to increase the amount and diversity of public access to the state's shorelines consistent with the natural shoreline character, property rights, public rights under the Public Trust Doctrine, and public safety.

(ii) Require that shoreline development by public entities, including local governments, port districts, state agencies, and public utility districts, include public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment. Where public access planning as described in WAC 173-26-221 (4)(c) demonstrates that a more effective public access system can be achieved through alternate means, such as focusing public access at the most desirable locations, local governments may institute master program provisions for public access based on that approach in lieu of uniform site-by-site public access requirements.

(iii) Provide standards for the dedication and improvement of public access in developments for water-enjoyment, water-related, and non-water-dependent uses and for the subdivision of land into more than four parcels. In these cases, public access should be required except:

(A) Where the local government provides more effective public access through a public access planning process described in WAC 173-26-221 (4)(c).

(B) Where it is demonstrated to be infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment or due to constitutional or other legal limitations that may be applicable.

In determining the infeasibility, undesirability, or incompatibility of public access in a given situation, local governments shall consider alternate methods of providing public access, such as offsite improvements, viewing platforms, separation of uses through site planning and design, and restricting hours of public access.

(C) For individual single-family residences not part of a development planned for more than four parcels.

(iv) Adopt provisions, such as maximum height limits, setbacks, and view corridors, to minimize the impacts to existing views from public property or substantial numbers of residences. Where there is an irreconcilable conflict between water-dependent shoreline uses or physical public access and maintenance of views from adjacent properties, the water-

dependent uses and physical public access shall have priority, unless there is a compelling reason to the contrary.

(v) Assure that public access improvements do not result in a net loss of shoreline ecological functions.

[...]

WAC 173-26-020, Definitions.

[...]

(36) "**Water-dependent use**" means a use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations.

[...]

(37) "**Water-enjoyment use**" means a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

[...]

(40) "**Water-related use**" means a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because: (a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or (b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Geologic and Engineering Services
Hillslope Area Between Schuster Parkway and Stadium Way
Tacoma, Washington

December 29, 2000

For
City of Tacoma

File No. 0570-047-00-3140/122900

GeoEngineers

December 29, 2000

City of Tacoma
Department of Public Works
747 Market Street
Tacoma, Washington 98402

Attention: Kathy Van Pelt

We are pleased to present two copies of our "Report, Geologic and Engineering Services, Hillslope Area between Schuster Parkway and Stadium Way, Tacoma, Washington." The scope of services completed for this study is described in our proposal dated June 27, 2000. Our services were authorized by the City of Tacoma on August 3, 2000.

We appreciate the opportunity to be of service to the City of Tacoma. Please call if you have questions regarding this report.

Respectfully submitted,

GeoEngineers, Inc.

Jon W. Koloski
Principal

SWH:GWH:wd:tw
Doc ID: 057004700R2.Doc

File No: 0570-047-00-3140

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HILLSLOPE AREA BETWEEN
SCHUSTER PARKWAY AND STADIUM WAY
TACOMA, WASHINGTON

INTRODUCTION

This report contains the results of our geologic and engineering evaluation of the effect of tree cutting on the hillslope stability between Schuster Parkway and Stadium Way in Tacoma, Washington. Our understanding of the project is based on conversations with you and the maps you provided on June 14, 2000. Our services have been performed in general accordance with our proposal dated June 27, 2000. The City of Tacoma authorized our services on August 3, 2000. The area on which this evaluation is focused is shown on the attached Vicinity Map, Figure 1.

Surficial landsliding has historically occurred within the study area. Some of the historical landslides have affected the function of Schuster Parkway. Logically, the City of Tacoma wishes to limit and/or reduce the amount of landsliding in the study area as much as possible. We understand that the City has received requests to cut trees within the project area to improve views from areas upslope of the study area. The purpose of our consultation is to evaluate the impacts of tree cutting in the study area relative to slope stability and landslide hazards.

PROJECT DESCRIPTION

The project study area consists of the undeveloped portion of the hillslope between Schuster Parkway and Stadium Way in Tacoma as shown on the Vicinity Map, Figure 1. The northwestern end of the project area is bordered by Borough Road (extended) along Garfield Park. The southeastern end is bordered by Stadium Way and Schuster Parkway (Highway 705) just southeast of Sixth Avenue (extended). The study area is approximately 6,600 feet in length. The hillslope varies from less than 100 feet wide on either end to about 400 feet wide near the center of the site. The ground surface in the study area rises steeply for as much as 200 feet from the toe of the slope to the streets, buildings and residential yards at the crest of the slope.

Stadium High School is located in the approximate center of the study area. For purposes of our study, the project area north of Stadium High School is called the "North Half" and the portion south of the high school is the "South Half", as shown in Figures 2A/2B through 5A/5B.

SCOPE OF SERVICES

The purpose of our services is to evaluate and map geologic features within the study area, including existing slide features, as a basis for ranking potential landslide hazard risk areas with respect to tree cutting. The specific scope of services completed for this project consists of the following tasks:

1. Research historical landslides and/or slope instability along the study area. Our research includes evaluation of GeoEngineers' in-house files, published reports and City of Tacoma records.
2. Review of previously published geologic maps and reports prepared for the site area and surrounding vicinity.
3. A detailed geologic reconnaissance of the site area.
4. Map observed landslides and/or areas of slope instability in the site area.
5. Develop a landslide hazard risk classification system based on our experience, research, observations and conversations with City of Tacoma personnel.
6. Develop a map of the landslide/slope instability areas based on the landslide hazard classification system noted above.
7. Summarize our observations and recommendations in a written report.

SITE CONDITIONS

GENERAL

The project area is located on the northeast margin of an upland plateau overlooking Commencement Bay in Tacoma, Washington. The area of interest consists of the undeveloped hillslope between Schuster Parkway and Stadium Way. The project area hillslope is the result of natural erosive processes and modification by development activities. All of the upland adjacent to the slope is developed with buildings and streets.

Development activity has occurred along the top and base of the slope for well over a century. A former roadway called Bayside Drive was located at the immediate base of the shoreline bluff. That road and multiple railroad tracks provided access to various shoreline industrial facilities. The shoreline was essentially fully developed from early in the 1900s until about the 1960s. Most of the original shoreline industrial development was removed by approximately the late 1960s. Schuster Parkway was constructed at the base of the shoreline bluff in the 1970s.

A mid-slope bench that extends nearly the full length of the North Half of the study area was also the location of a rail spur. Trestles extended from the mid-slope spur to some of the industrial facilities along the shoreline. That rail spur was abandoned and is now the location of a pedestrian trail. Several buildings that were partially excavated into the toe of the steep slope have been removed, except for portions of the original foundations.

Development along the southern top of the steep slope includes Stadium Way, Stadium High School and the Stadium Bowl (football stadium), together with some multi-story condominium residence buildings. North of the Stadium Bowl, the top of the slope is lined with single-family residences. These residences generally date to the late 1800s and early 1900s. The Stadium Bowl is constructed in a natural ravine, originally named "Old Woman's Gulch", that was partially filled in the 1930s.

TOPOGRAPHY

Virtually all of the study area is a steep slope. As noted above, the slope results from a combination of natural processes and development activities. The slope is generally aligned parallel to the Commencement Bay shoreline. The upper slope alignment is interrupted by one ravine located about 200 feet north of North 7th Street and by the ravine occupied by Stadium Bowl. Garfield Park, which marks the north end of the study area, is in a natural ravine that extends from the upland surface to the level of the existing shoreline.

The overall slope height varies from about 70 feet to more than 210 feet in the study area. Elevations at the site range from about 20 feet above sea level (MSL) along Schuster Parkway to about Elevation 230 feet MSL along the north portion of Stadium Way and to about Elevation 150 feet in the southern portion of Stadium Way.

We observed slope inclinations in the study area to range between about 20 degrees (from horizontal) and 90 degrees (i.e., vertical) with the average inclination of about 45 degrees (100%). Many areas of near vertical inclination are along the base of the bluff and are clearly the product of excavation for road construction. Near-vertical zones are also common along the mid-slope rail/trail bench; these are also excavated. Additional near-vertical areas occur near the top of the slope, but these are typically the head of past or active landslide areas. Slope inclinations are indicated in Figures 2A/2B. Retaining walls support only a very small portion of the overall slope. The primary wall locations are along the eastern (outboard) edge of Stadium Way south of Division Avenue and along the west edge of the southbound lanes of Schuster Parkway particularly at the extreme southern end of the project area. Aside from the very steep areas noted above, the slope stands as steep as the combination of surficial soil and vegetation will allow. Additional discussion of the geologic conditions, soils and hillslope stability conditions is presented in the following sections of this report.

VEGETATION

The vegetation we observed in the study area includes a comprehensive canopy of mature deciduous trees with some areas of small (recently trimmed) trees, some open grass and brush areas and a very limited area with essentially no vegetation. The character and distribution of vegetation in the study area is indicated on Figures 3A/3B.

It is significant that there are virtually no conifer trees in the mature forest, and we noted very few conifer stumps. We noted that the vast majority of trees are big leaf maple, red alder and black cottonwood. These species of trees are the most common in this region to voluntarily repopulate areas cleared of historical "native" trees. Clearing can occur deliberately, as with logging, or can be the result of landslides. We also observed a few poplars, oaks and other non-indigenous species.

Almost all of the mature deciduous trees are quite tall – typically 50 to 70 feet, and are about the same size. Many large trees have split or toppled. Some portions of the slope under the deciduous canopy forest are practically free of ground cover or understory brush, while moderate to dense brush and blackberry vines occur in other places. The open areas (with sparse or no

trees) are characterized by dense grass cover and blackberry vines. The grass areas appear to have been hydroseeded.

The underbrush is most common where light penetration is best, e.g., where mature trees have been topped or removed, or where the trees have been displaced by past landslides. We noted that almost no underbrush occurs under the tall canopy trees in a large portion of the South Half of the study area. Trimming or pruning of trees has occurred along the upper portion of the slope, especially adjacent to the residences north of the Stadium Bowl. Additional tree crown trimming is evident along the east edge of the southern portion of Stadium Way. The upper slope trees have been completely removed immediately adjacent to the apartment buildings located just south of Stadium High School. A substantial amount of landscape waste has been dumped on the upper crest of the slope adjacent to these apartment buildings. Based on our conversations with City of Tacoma staff, we understand that trees in the project area were regularly topped or cut until the 1970s.

Throughout most of the project area, we noted that the mature deciduous trees are extensively invaded with climbing vines. In many places, the vines have reached the uppermost tips of the tree canopy. The climbing vines include ivy and nightshade. Many of the trees invaded by vines appear to be dead or dying.

We observed that both trees and brush in areas where springs occur (i.e., wet soil conditions) are the type that commonly prefer wet soils on a year-around basis suggesting that the springs are more or less perennial.

GEOLOGIC AND SOIL CONDITIONS

Our understanding of geologic conditions within the site area is based on a geologic reconnaissance performed at the site from September 14 to September 18, 2000, our review of published and unpublished reports and our experience. The approximate distribution of geologic materials at the site is shown in Figures 4A/4B.

The Puget Sound basin, including the project area, was covered on several occasions over the last 1-plus million years by glacial ice that advanced from the north then melted and disappeared. Between glacial periods climatic and geologic process conditions were similar to modern conditions. The time between glaciations is called an interglacial period. The most recent ice advance is called the Vashon glaciation – this ice reached a maximum thickness of approximately 2,000 feet or more in this project area, then melted and disappeared from this region approximately 12,000 years ago. The soils deposited during the pre-Vashon interglacial period are called the Kitsap formation. After disappearance of the Vashon ice, weathering, erosion and deposition processes similar to those of today resumed. All of the pre-Vashon soils were overridden and highly consolidated by the weight of the ice. The post-glacial soils are typically quite loose by comparison. Geologic materials exposed in the study area consist of a series of glacial and interglacial deposits, recently deposited colluvium, slide material, and fill.

The oldest geologic unit at the site is the Kitsap formation. The Kitsap formation in this area consists of two relatively distinct layers. The upper layer is very dense laminated silt and clayey silt with scattered fine sand lenses. The lower layer consists of a dense to very dense mixture of brownish-gray interbedded gravel and sand. The Kitsap formation is only exposed in the North Half of the project area. Very dense silt layers within the Kitsap formation commonly form near-vertical slopes at the site area; the Kitsap silt material severely restricts downward percolation of ground water.

Vashon advance outwash is mapped above the Kitsap formation. The advance outwash consists of medium dense to dense sand and gravel that was deposited by meltwater streams as the Vashon-age ice sheet advanced through the site area. Advance outwash was consolidated by the over-riding Vashon glacial ice sheet, but, due to the gradation, this outwash is highly permeable.

Vashon glacial till is mapped above the advance outwash, but we observed no exposures of till in the study area. Glacial till consists of a very dense mixture of silt, sand and gravel that was deposited and compacted at the base of the advancing ice sheet.

Fill may exist on the edges of yard areas at the top of the slope in the North Half of the site and may also be present beneath all or part of Stadium Way in the South Half of the site. The distribution and content of these fills is presently unknown. Fill exists in two additional areas of the site: an unnamed ravine located about 250 feet northwest of North 7th Street, and beneath the Stadium High School football stadium (Old Woman's Gulch). The content and history of the fill in the unnamed gully is unknown. Our understanding of the fill in Old Womens Gulch is based on our review of a report prepared by Hart Crowser in 1977. The fill is reported to consist of loose to dense silty sand with cinders and lenses of wood. The fill extends to a maximum depth of about 80 feet beneath the northern end of the football field, based on the report.

Recent slide material and colluvium consists of a mixture of native material in a loose to medium dense condition. Landslide-deposited material is generally found at the base of bluffs or at the base of slide scarps within the site area. A blanket of loose colluvium covers most of the hillslope in the study area, where the dense glacial and interglacial soils are obscured. All of the hillslope vegetation is rooted in colluvium or fill soils. The colluvium blanket is especially loose in the South Half of the study area where no ground cover of underbrush occurs.

GROUND WATER CONDITIONS

The occurrence of ground water depends on precipitation, topographic setting and geologic stratigraphy. Stormwater collection systems, and land uses can also influence the occurrence of ground water.

We observed and mapped about 20 springs during our site reconnaissance in September 2000. Dames & Moore identified 27 springs at the project site in 1970. Most of the springs identified by Dames & Moore were observed during our site reconnaissance. The approximate locations of the springs are shown in Figures 3A/3B.

The majority of the springs are located near the base of the advance outwash unit, near the contact between the advance outwash and the Kitsap formation and are typically located well above the base of the study area slope. As noted above, the silt layers in the upper portion of the Kitsap formation are relatively impermeable to the vertical flow of ground water.

We observed seven springs located within the advance outwash unit, about thirty feet above the contact between the advance outwash and the Kitsap formation; these springs are also well above the slope toe. These springs are located east of Division Avenue in the South Half of the site area and are shown on Figure 3B. These springs probably occur on a discontinuous silt layer within the advance outwash.

Flowing or standing water was observed at all the spring locations. We estimate that groundwater flow from the springs ranged from less than 1 gallon per minute to about 3 gallons per minute at the time of our site visits. We expect that the groundwater flow from the springs and seeps varies according to season. Higher flows can be expected during and immediately after the wet winter months. The hillslope is saturated below each of the springs. Some of the spring water flows directly to the base of the slope, while some is intercepted and diverted some distance by the mid-slope rail/trail bench.

SURFACE WATER CONDITIONS

Surface water can be a major factor in the destabilization of slopes. Surface water runoff sources include direct rainfall plus runoff from roof downspouts, storm sewer discharge pipes, infiltration facilities, impervious surfaces (streets) or from unpaved surfaces (lawns or undeveloped areas). Our reconnaissance was completed during a period of relatively dry weather and the presence of surface water flowing to the site from up-slope areas was not observed. Based on conversations with City of Tacoma personnel, we understand that surface water runoff from up-slope areas was historically discharged to street ends and/or to unnamed gullies on the hillslope. We also understand that surface water runoff from streets and sidewalks is now captured by the City of Tacoma storm sewer system, but discharge control from private properties is not documented.

LANDSLIDE HAZARDS

GENERAL

Historically, the primary type of landslide event to occur in this study area consists of earth/mud flows. These landslides ranged in volume from a few tens of cubic yards to a few thousand cubic yards. This type of failure involves the surface soils, such as colluvium and fill, but the underlying very dense native soils are only rarely included. These events almost always occur during or shortly following major precipitation events, especially when a heavy rain squall occurs within a prolonged period of wet weather. The direct cause is commonly concentrated surface water flow or broad area saturation of surface soils caused by rain-on-snow. The most severe type of event is a rapid failure of a significant volume of soil that liquefies and flows to the base of the bluff or beyond. The damage from earth/mud flow events is usually more pronounced

at the toe of the slope or in the "run-out" area as compared to loss of ground support at the head of the slide. Large trees transported by earth/mud flows are particularly dangerous projectiles.

The areas most prone to earth/mud flow landslides are concentrations of loose fill or colluvium, especially those which do not have a protective vegetation cover or some type of external support, e.g., a retaining wall. Vegetation cover has a number of benefits. The roots add cohesion to loose soil. A dense evergreen canopy or ground cover of dense brush or grass protects the soil from direct impact of rainfall, thus providing erosion protection. Trees help to remove water from the soil through evapotranspiration. Conifer trees and evergreen shrubs transpire water year-round, but deciduous trees are only effective for that purpose when leaves are in place and growing.

The most effective type of vegetation is small- to moderate-sized healthy trees in combination with dense brush ground cover. Mature tall trees have a much lower ratio of root spread to height than more modest sized trees. The larger trees also have a large "wind sail" area and thus are more subject to toppling. Very often an actual landslide initiation occurs when a large tree topples and the uprooting action destabilizes a significant volume of loose saturated soil.

CITY OF TACOMA DEFINITION

Landslide hazards at the site were evaluated by a review of the City of Tacoma Municipal Code, Chapter 13-11, Critical Areas Preservation, revised June 2000, our observations at the site and conversations with City of Tacoma personnel. The City of Tacoma defines a Landslide Hazard Area as follows (quoted portion in italics):

1. *Any area characterized by slopes greater than 15 percent; and impermeable soils (typically silt and clay) interbedded with permeable granular soils (predominantly sand and gravel) or impermeable soils overlain with permeable soils; and springs and ground water seepage.*
2. *Any area which has exhibited movement during the Holocene epoch (from 10,000 years ago to present) or which is underlain by mass wastage debris of that epoch.*
3. *Any area potentially unstable due to rapid stream incision, stream bank erosion or undercutting by wave action.*
4. *Any area location on an alluvial fan presently subject to or potentially subject to inundation by debris flows or deposition of stream transported sediment.*
5. *Any area where the slope is inclined at an angle greater than the angle of repose of the soil.*
6. *Any area with a slope defined by the United States Department of Agriculture Soil Conservation Service as having a "severe" building limitation for building site development.*
7. *Any shoreline designated or mapped as Class U, Uos, Urs or I by the Washington Department of Ecology Coastal Zone Atlas.*

CONCLUSIONS AND RECOMMENDATIONS

GENERAL

The entire project area meets one or more of the criteria stated above for a Landslide Hazard Area, as defined by the City of Tacoma. It is noteworthy that the existing Landslide Hazard Area designation is not further subdivided to indicate a relative degree of risk. It is our opinion that the landslide hazard risk is not consistent throughout the site area, but the risk is significant throughout.

It is our opinion that appropriate trimming of trees as discussed below will not be detrimental to slope stability. Some vegetation management and enhancement is recommended that will help to improve relative slope stability conditions over the conditions that exist at this time. The recommendations include removal of some trees under closely controlled conditions. We also recommend that specific criteria be developed for tree trimming or removal.

We conclude that some additional research should be conducted to evaluate public and private storm drainage measures adjacent to the study area.

LANDSLIDE HAZARD RISK EVALUATION

Our evaluation of landslide risk within the study area results in two qualitative risk categories: Moderate Risk and High Risk Landslide Hazard Areas as described below. Ordinarily a "Low Risk" category should also be defined, but in our opinion that is not appropriate for this study area.

All of the project area is mapped as High Risk to Moderate Risk landslide hazard area. The highest risk areas generally consist of the steepest slopes, poor or no stabilizing vegetation, water-softened areas, advance outwash over Kitsap formation silt and existing or historic slide areas. Several of the mapped High Risk landslide hazard areas occur near the end of streets up-slope of the study area. This may indicate active or historical disposal of surface water runoff in these areas. The disposal of storm runoff from private property was not investigated a part of this study, but that source of water is a likely contributory cause of hillslope instability. Many other past or active landslide areas are directly related to springs or seeps.

In our opinion "Moderate Risk" areas as those that appear to be relatively stable in their present configuration. "High Risk Areas" are those which are marginally stable (or unstable) in their present configuration, typically because of a number of interrelated factors as listed below.

Removal of most, or all, vegetation in either of these areas would have a decided negative impact on slope stability in the immediate and adjacent areas. As noted below we recommend activities to encourage more vegetation development throughout the hillslope. The approximate distribution of the Moderate Risk and High Risk landslide hazard areas are shown in Figures 5A/5B. The criteria we considered to define the risk areas are as follows:

Moderate Risk Landslide Hazard Areas

- All of the study area slope that is more than 20 feet outside of areas designated as a High Risk potential.

High Risk Landslide Hazard Areas

- All slopes steeper than 15 percent.
- Within 20 feet of active and historic landslide areas.
- Hillslope areas above springs or seeps and water-softened or marshy areas down-slope of seepage areas.
- Hillslopes with observed surficial instability (creep).

VEGETATION IMPACTS

In our opinion, it is possible to top or trim any of the existing trees in the study area as long as the pruning does not kill the tree. It should be noted that tree stump root systems will rot after about 5 to 7 years. Decomposed roots will leave voids in the soil. The voids will act as conduits for surface and ground water, potentially lowering the overall stability of the slope. It is also our opinion that dead trees or those in serious jeopardy of survival should be felled.

We recommend that all tree trimming or removal be accomplished with minimum disturbance to the surrounding soil. Trees that must be felled or trimmed should be considered individually relative to access, the method of removal or trimming and the disposition of the limbs and/or trunks. We further recommend that trimming or pruning be accomplished to result in a generally uniform tree height.

We recommend that dense, low vegetation growth at the site be encouraged, especially in areas where existing ground cover is sparse or absent. The ground cover vegetation can consist of shrubs and low trees and particularly evergreen brush. The vegetation will improve slope stability by limiting erosion and by increasing evapotranspiration of surface and ground water. We recommend that an arborist be consulted to:

1. Develop specific details for trimming, pruning and/or removal of trees depending on the species, vitality and other relevant factors.
2. Develop recommendations for dealing with the trees that are invaded with climbing vines.
3. Provide recommendations for the type of ground cover that will function as noted above and be suitable for the site conditions.

DRAINAGE IMPROVEMENTS

We recommend that the City of Tacoma investigate surface water runoff patterns in the area immediately up-slope of the project area. As previously stated, High Risk landslide areas were mapped down-slope of the intersections of North 6th and Stadium Way, North 4th and Stadium Way, Division Avenue and Stadium Way, and South 4th and Stadium Way. The existence of these features relative to the roadway intersections may indicate discharge of surface water runoff to the hillslope in these areas.

We recommend drainage improvements be accomplished to reduce the area and extent of saturated surface soils caused by water emerging from seeps and springs. The measures will reduce the potential for massive ground movement as well as the potential for erosion/sedimentation in the presently saturated areas. The details of the drainage recommendation are not a part of this consultation, but we would be please to assist the City in such an effort.

We appreciate the opportunity to be of continued service to the City of Tacoma on this project. Please contact us if you have questions regarding this revised report.

Yours very truly,

GeoEngineers, Inc.

Stephen W. Helvey
Project Geologist

Jon W. Koloski
Principal

SWH:JWK:wd:tw
Doc ID: 057004700R2.Doc

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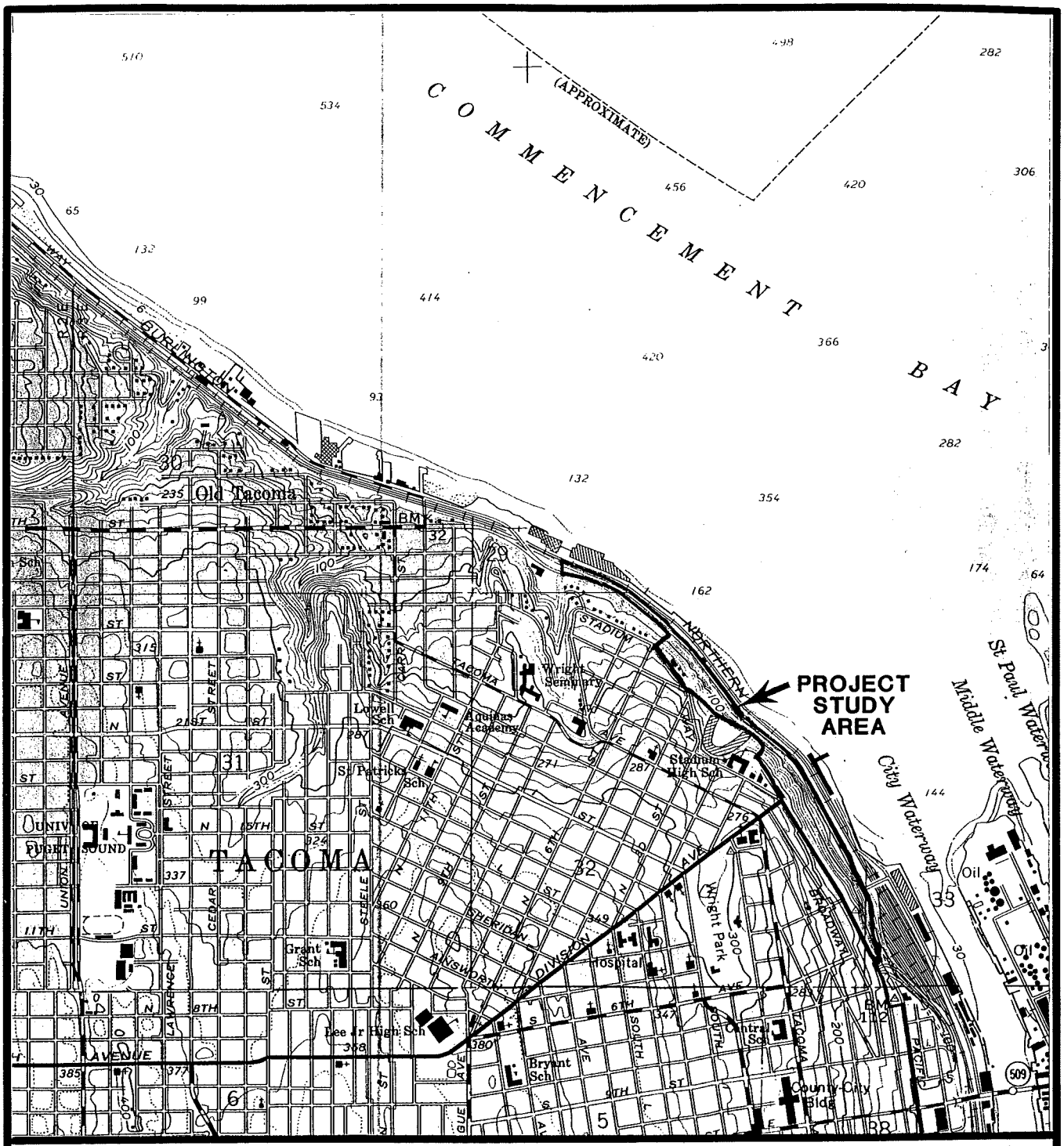


0 2000 4000

SCALE IN FEET

N

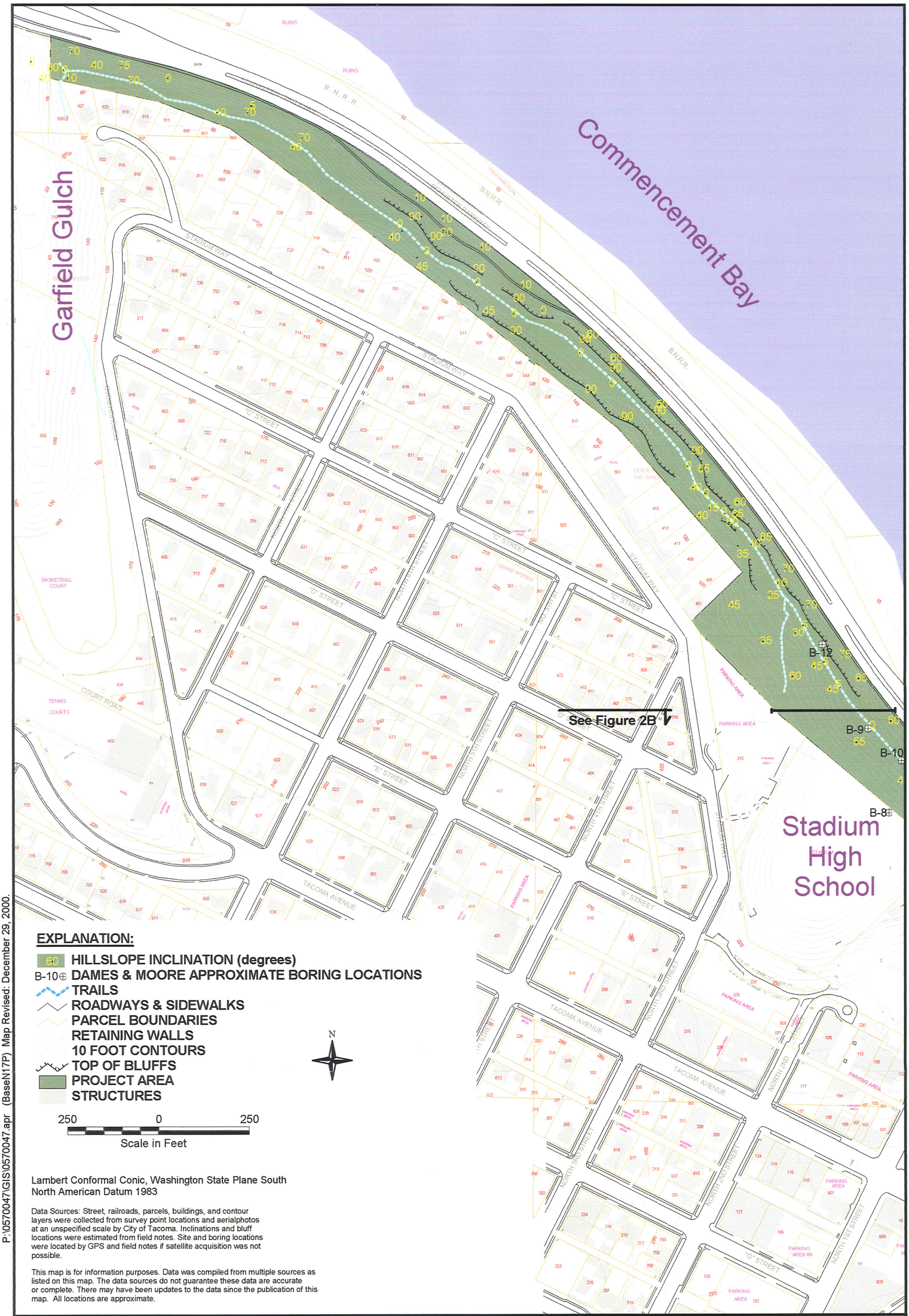
Reference: USGS 7.5' topographic quadrangle map, "Tacoma North, WA," dated 1961 photorevised 1981.

0570-047-00 SWH:RJW 12/11/00

GeoEngineers

VICINITY MAP

FIGURE 1



EXPLANATION:

- 60 HILLSLOPE INCLINATION (degrees)
- B-10⊕ DAMES & MOORE APPROXIMATE BORING LOCATIONS
- TRAILS
- ROADWAYS & SIDEWALKS
- PARCEL BOUNDARIES
- RETAINING WALLS
- 10 FOOT CONTOURS
- TOP OF BLUFFS
- PROJECT AREA
- STRUCTURES

N

250 0 250

Scale in Feet

Lambert Conformal Conic, Washington State Plane South
North American Datum 1983

Data Sources: Street, railroads, parcels, buildings, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Inclinations and bluff locations were estimated from field notes. Site and boring locations were located by GPS and field notes if satellite acquisition was not possible.

This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.

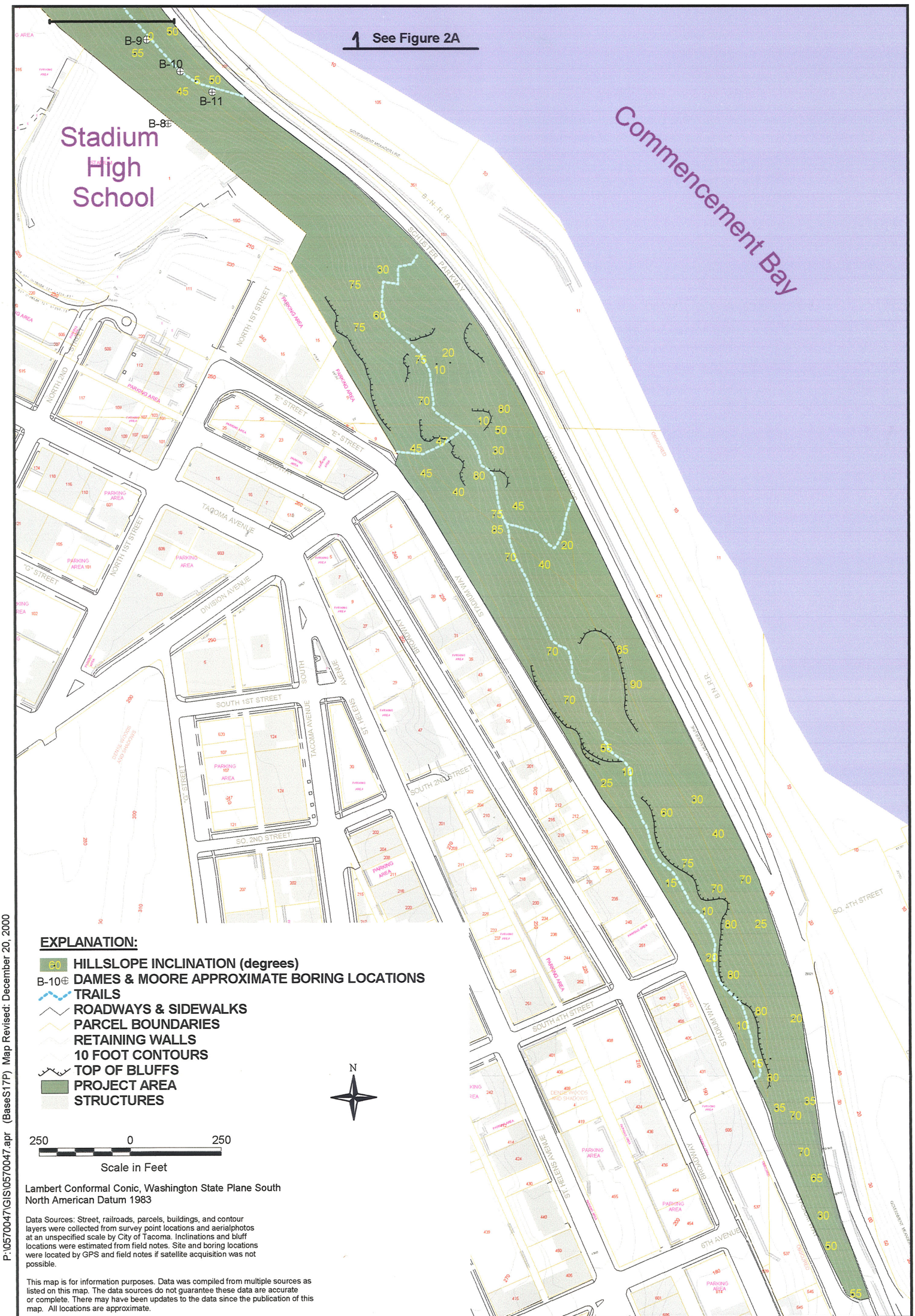
P:\0570047\GIS\0570047.apr (BaseN17P) Map Revised: December 29, 2000.

DJS

Geo Engineers

PROJECT SITE MAP:NORTH HALF

FIGURE 2A



Lambert Conformal Conic, Washington State Plane South
North American Datum 1983

Data Sources: Street, railroads, parcels, buildings, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Inclinations and bluff locations were estimated from field notes. Site and boring locations were located by GPS and field notes if satellite acquisition was not possible.

This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.

P:\0570047\GIS\0570047.apr (BaseS17P) Map Revised: December 20, 2000

DJS

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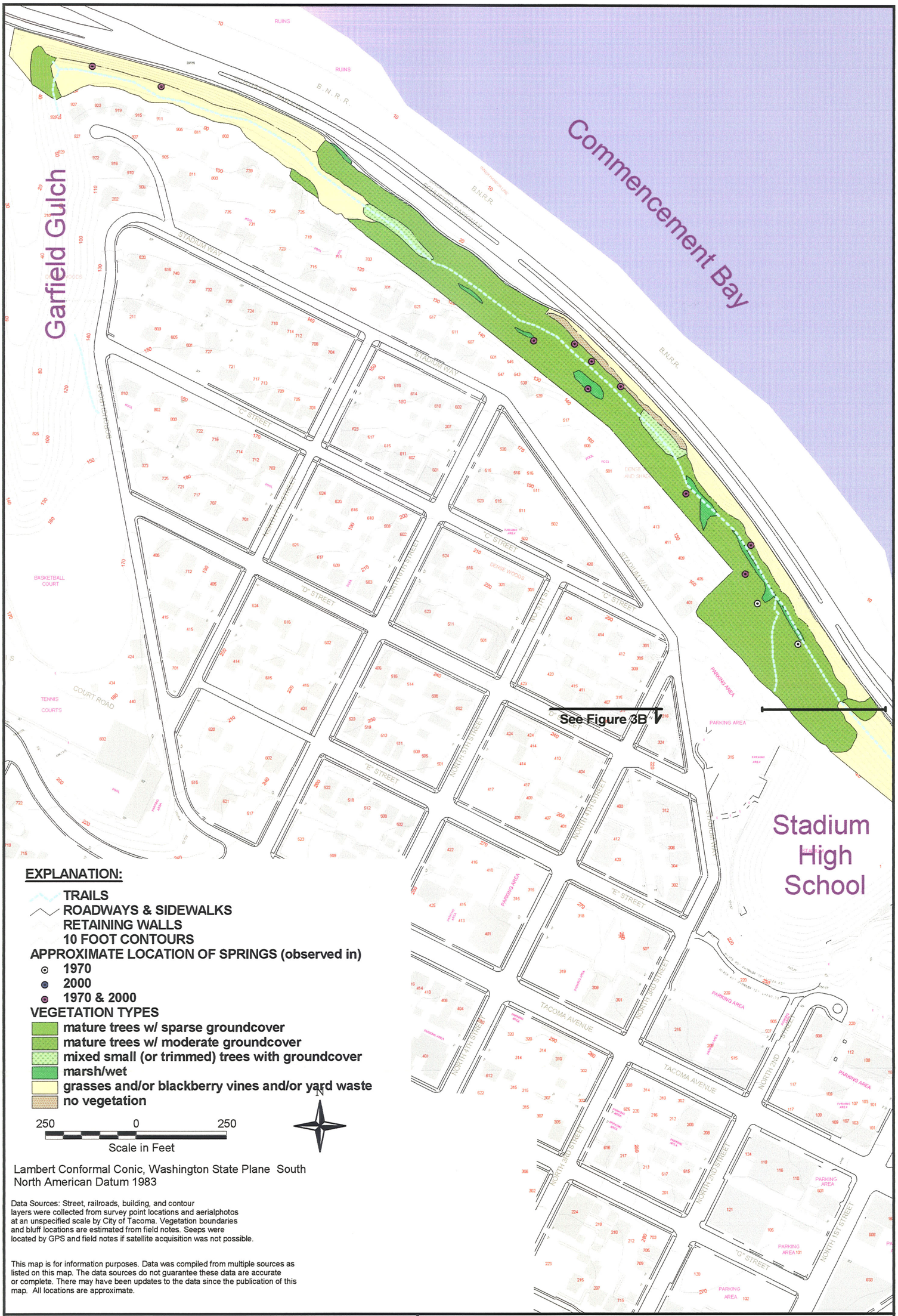
PROJECT SITE MAP:SOUTH HALF

FIGURE 2B



EXPLANATION:

- TRAILS
- ROADWAYS & SIDEWALKS
- RETAINING WALLS
- 10 FOOT CONTOURS

APPROXIMATE LOCATION OF SPRINGS (observed in)

- 1970
- 2000
- 1970 & 2000

VEGETATION TYPES

- mature trees w/ sparse groundcover
- mature trees w/ moderate groundcover
- mixed small (or trimmed) trees with groundcover
- marsh/wet
- grasses and/or blackberry vines and/or yard waste
- no vegetation

250 0 250

Scale in Feet

Lambert Conformal Conic, Washington State Plane South
North American Datum 1983

Data Sources: Street, railroads, building, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Vegetation boundaries and bluff locations are estimated from field notes. Seeps were located by GPS and field notes if satellite acquisition was not possible.

This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.

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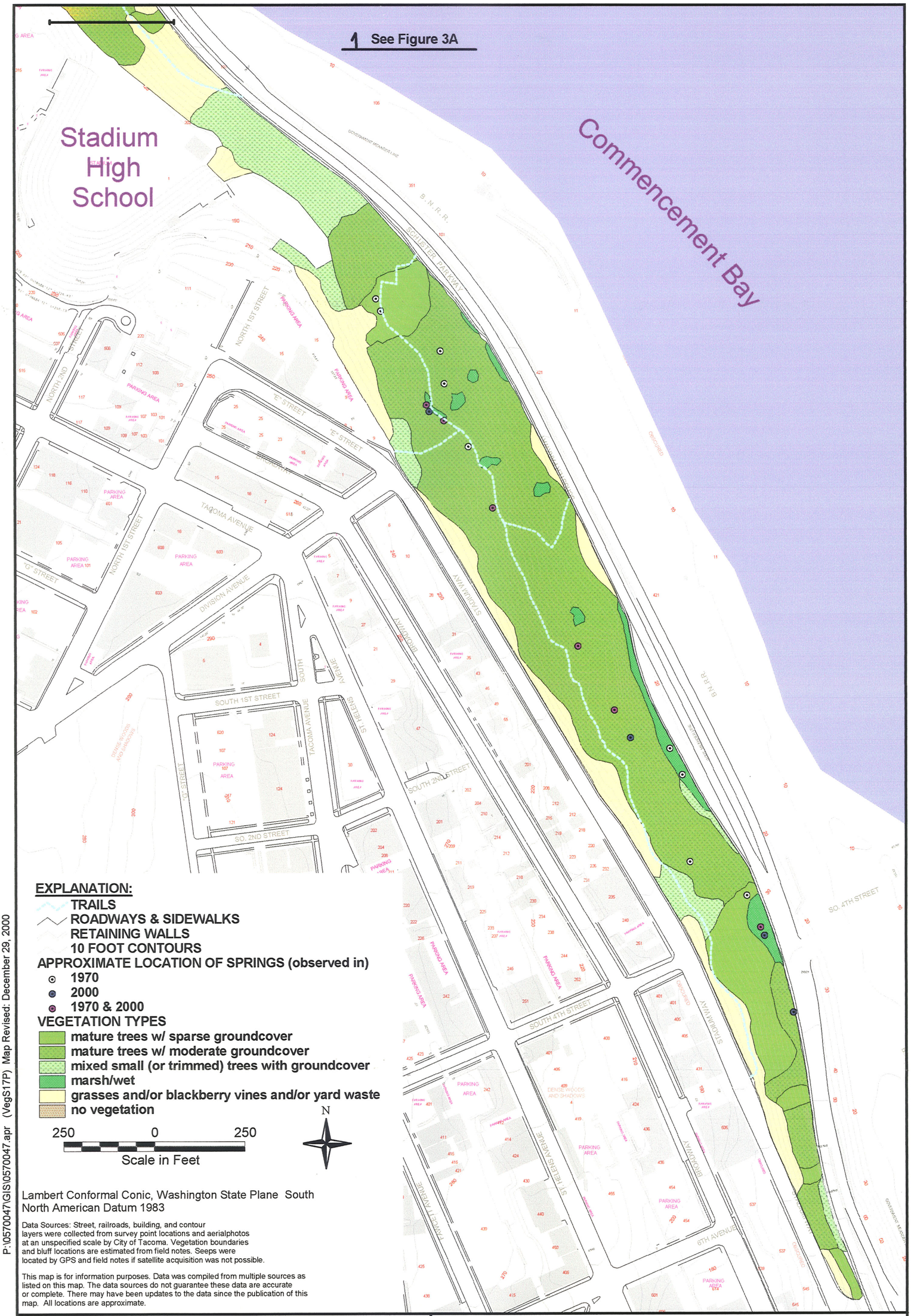
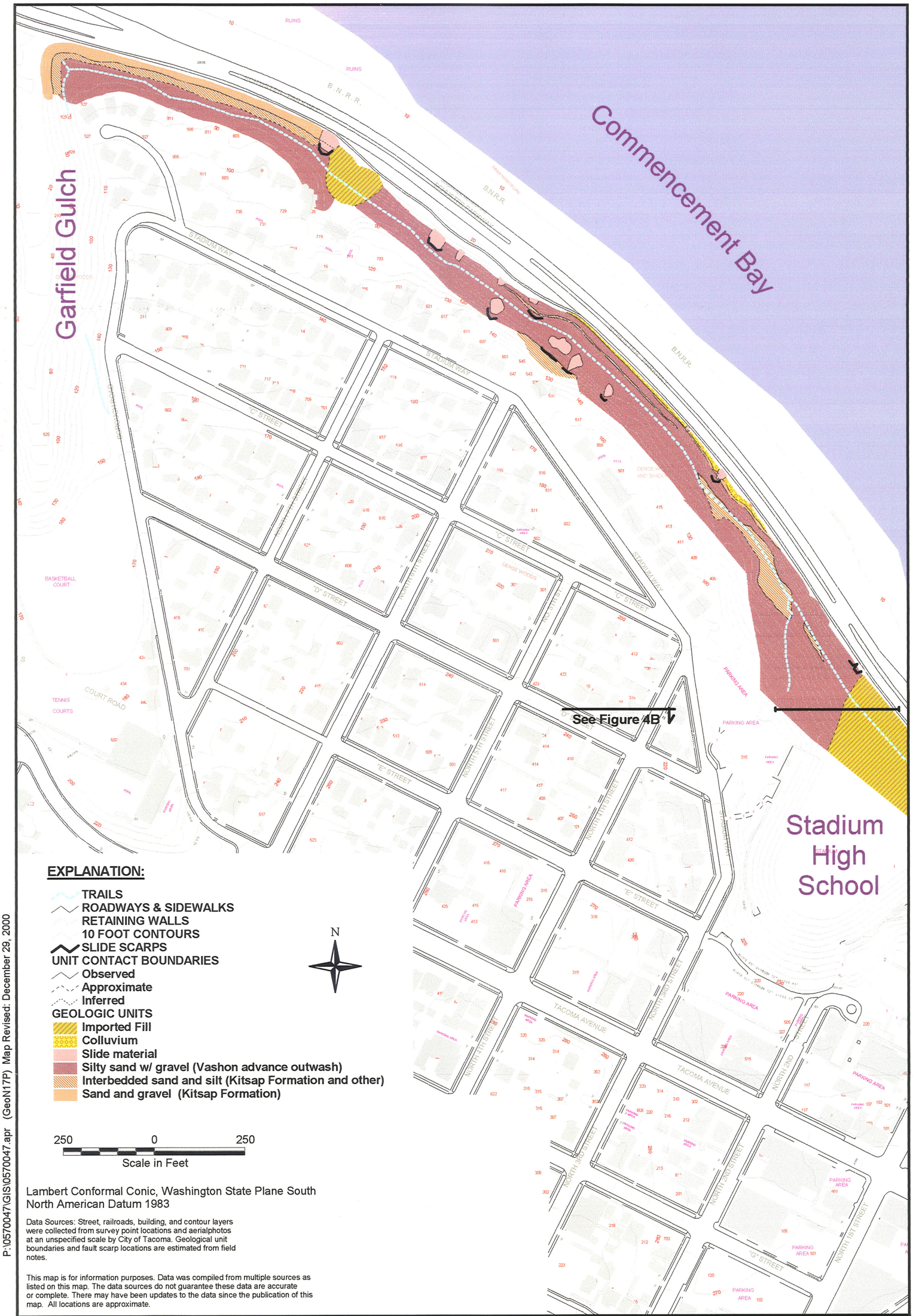
VEGETATION TYPES: NORTH HALF

FIGURE 3A


See Figure 3A
Stadium High School
Commencement Bay
EXPLANATION:
TRAILS
ROADWAYS & SIDEWALKS
RETAINING WALLS
10 FOOT CONTOURS
APPROXIMATE LOCATION OF SPRINGS (observed in)
1970
2000
1970 & 2000
VEGETATION TYPES
mature trees w/ sparse groundcover
mature trees w/ moderate groundcover
mixed small (or trimmed) trees with groundcover
marsh/wet
grasses and/or blackberry vines and/or yard waste
no vegetation
250 0 250
Scale in Feet
N
Lambert Conformal Conic, Washington State Plane South
North American Datum 1983
Data Sources: Street, railroads, building, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Vegetation boundaries and bluff locations are estimated from field notes. Seeps were located by GPS and field notes if satellite acquisition was not possible.
This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.
P:\0570047\GIS\0570047.apr (VegS17P) Map Revised: December 29, 2000
DJS
Geo Engineers
VEGETATION TYPES:SOUTH HALF
FIGURE 3B



Lambert Conformal Conic, Washington State Plane South
North American Datum 1983

Data Sources: Street, railroads, building, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Geological unit boundaries and fault scarp locations are estimated from field notes.

This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.

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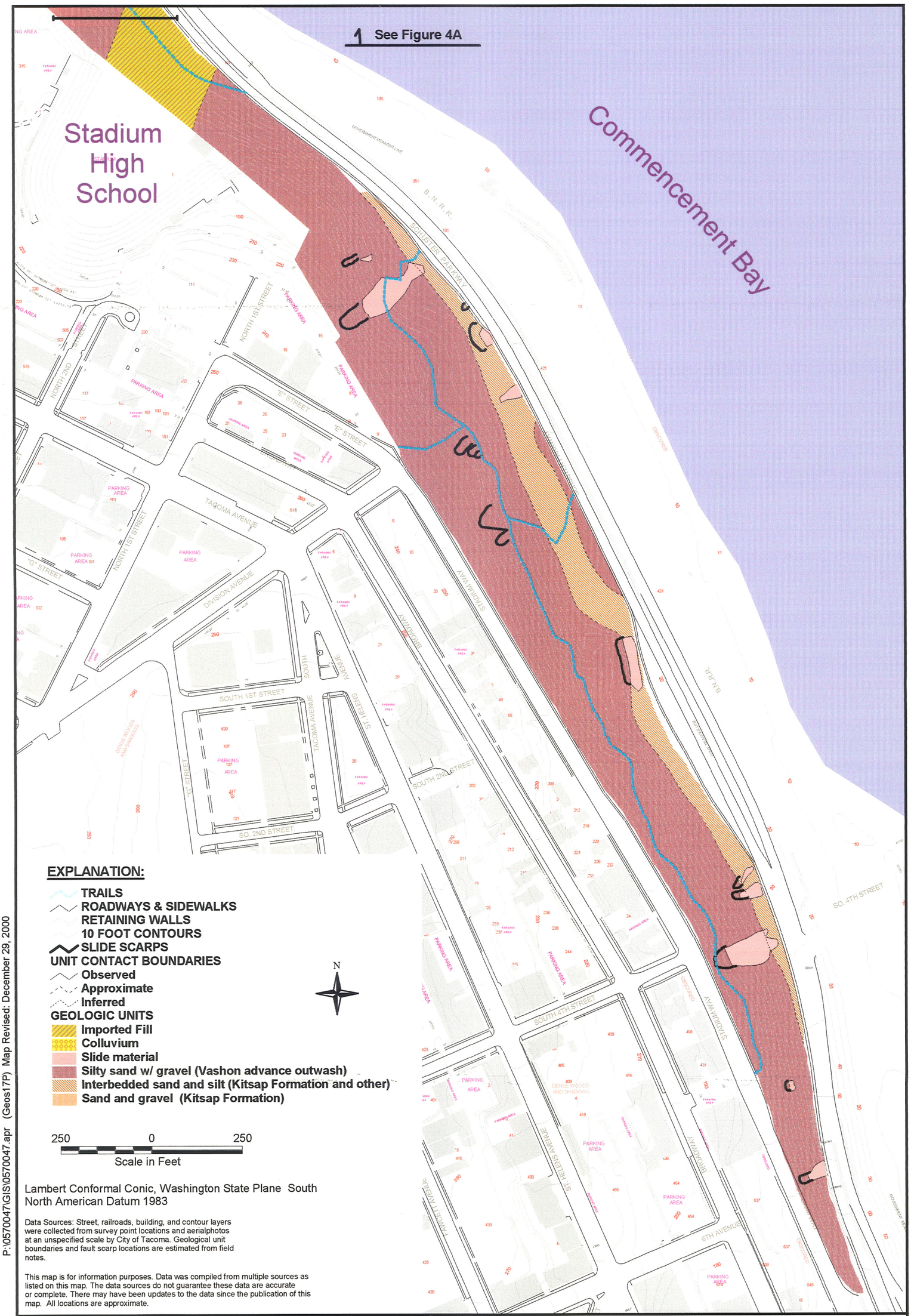
GEOLOGIC MAP:NORTH HALF

FIGURE 4A



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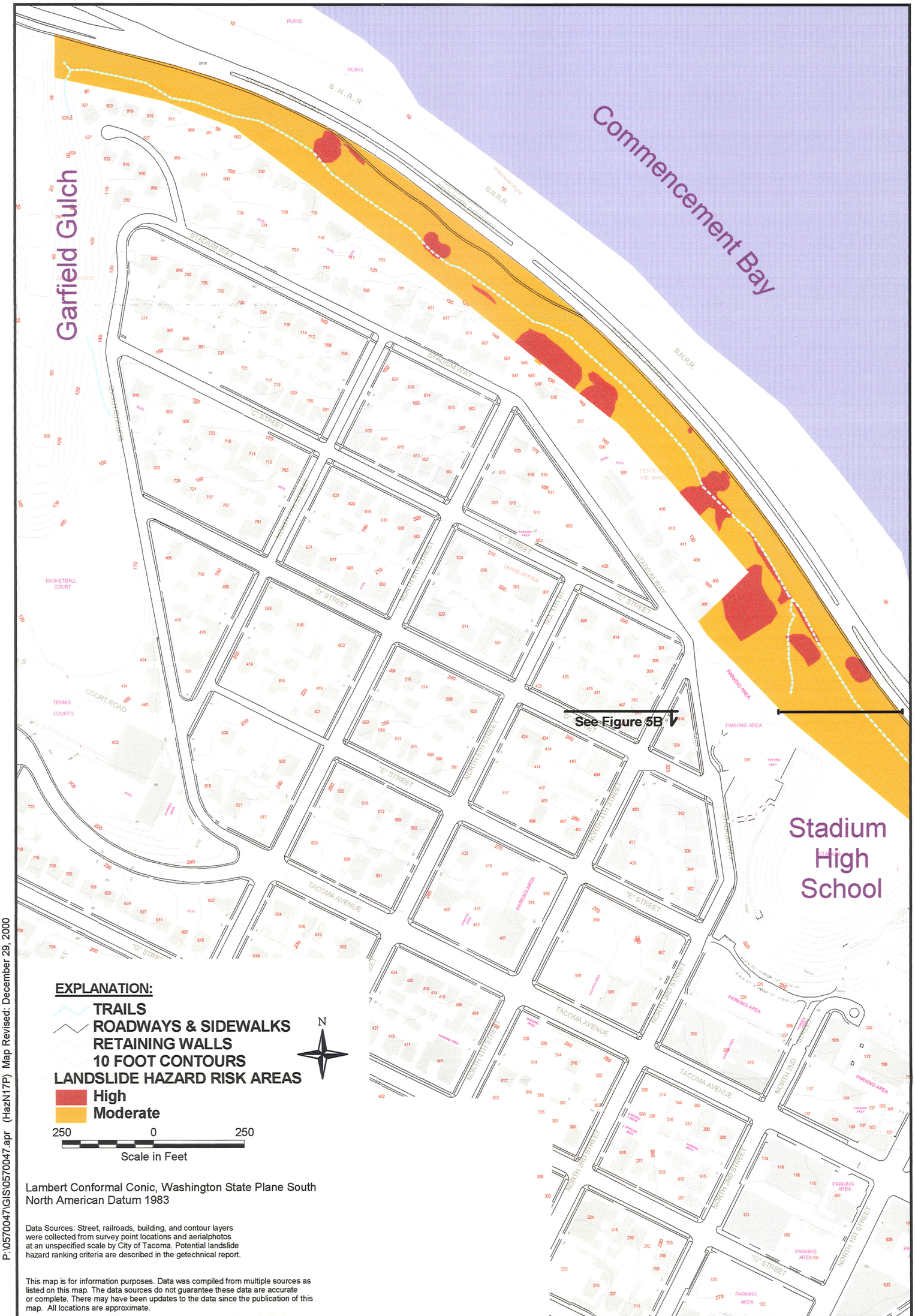
GEOLOGIC MAP:SOUTH HALF

FIGURE 4B



Lambert Conformal Conic, Washington State Plane South
North American Datum 1983

Data Sources: Street, railroads, building, and contour layers were collected from survey point locations and aerialphotos at an unspecified scale by City of Tacoma. Potential landslide hazard ranking criteria are described in the getechnical report.

This map is for information purposes. Data was compiled from multiple sources as listed on this map. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this map. All locations are approximate.

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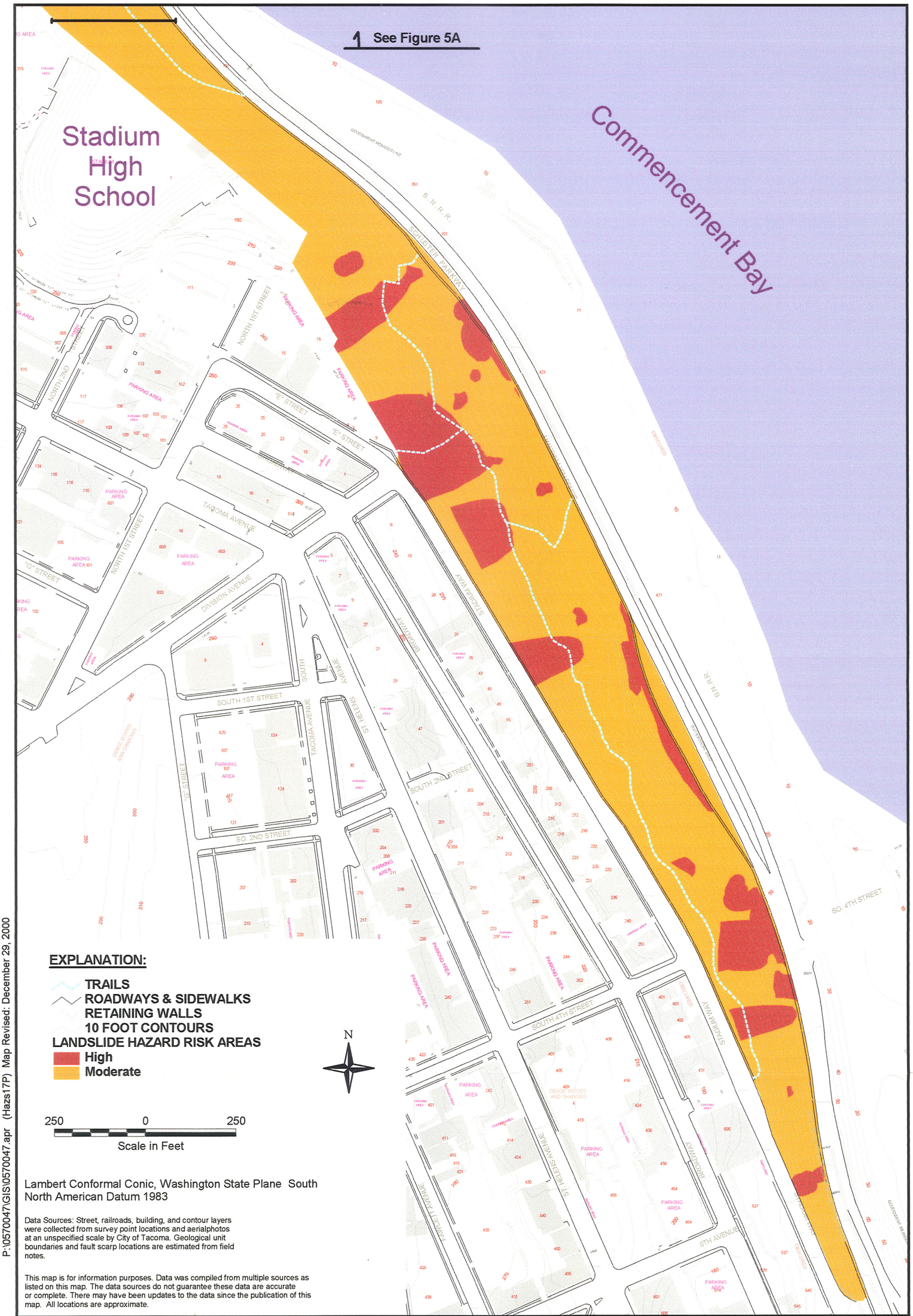
LANDSLIDE HAZARD RISK AREAS:NORTH HALF

FIGURE 5A



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LANDSLIDE HAZARD RISK AREAS:SOUTH HALF

FIGURE 5B

FUTURE OF THE BAYSIDE TRAILS
Public Workshop

March 31st, 2011, 5:30 to 7pm, Tacoma Municipal Building North Room 16

OVERVIEW:

The Community and Economic Development Department initiated a public discussion of the future of the Bayside Trails and Schuster Parkway slope open space area. On March 31, 2011, City staff held a well-attended public workshop (65 people signed in) to solicit input. The workshop was part of a process to better understand the community's desires and concerns regarding this area.

BACKGROUND:

City staff presented the following background information at the start of the workshop:

What are the Bayside Trails?

Opened in 1975, the Bayside Trails system included 5 shelters along 2.5 miles of trail, within a 20 acre greenbelt adjacent to the Stadium District. Trail development was funded by a federal Land and Water Conservation Fund grant. The middle segment was created through a "rails-to-trails" conversion of a nonoperational railroad spur. The system provided a pedestrian link to the waterfront, public access to an urban green space, recreational opportunities, and views of the water. Today, most of the original trail system is closed to the public.

Current conditions

Over time, ongoing challenges took their toll and, around the year 2000, lead the City to close most of the system. The primary issues included erosion and stormwater runoff challenges, public safety concerns and high ongoing maintenance needs. Though most of the trails remain closed and unmaintained, problems still persist, calling for a different management approach. Though the City determined the system should be temporarily closed, a long-term approach for managing this community asset remains to be developed.

Why is the City discussing this now?

- Opportunities to support City initiatives for open space, walkability, and public safety
- The South Stadium Way Arterial Project may create opportunities
- The Shoreline Master Program update includes the Bayside Trails as a public access option
- City obligations associated with the federal funds that paid for Bayside Trails

Next Steps

- SHORT-TERM – Develop and implement open space/stormwater/public safety management strategies
- LONG- TERM – Develop future planning process for the trails/public access

Staff contacts:

- Elliott Barnett, Open Space Program
  (253) 591-5389 elliott.barnett@cityoftacoma.org
- Steve Atkinson, Shoreline Master Program update
  (253) 591-5531 satkinson@cityoftacoma.org
- Diane Wiatr, Mobility Coordinator
  (253) 591-5380 dwiatr@cityoftacoma.org
- Raymond Van Der Roest, South Stadium Way Redesign
  (253) 591-5945 rvanderroest@cityoftacoma.org

PUBLIC DISCUSSION SUMMARY:

At the public meeting, staff requested input on the future of the Bayside Trails and Schuster slope. To facilitate the discussion with a high number of participants, staff requested responses to three prepared questions, then opened the discussion up to other comments. Comments were also provided in writing.

The primary objective was to identify the public's views including more broadly held viewpoints and themes. To that end, staff employed a method consisting of summarizing comments on flip pads, then asking for a show of hands from those who agreed with the statement. This provided an indication of the level of agreement with each statement. Measuring the level of concurrence in this manner is not an exact science. The intent was to capture all comments, while a secondary objective was to get a sense of common themes and perspectives.

A broad range of views were expressed, and some key themes and points of broader agreement did emerge. The following Executive Summary gives an overview of the key themes. The Detailed Comments Summary provides a more complete and detailed summary.

EXECUTIVE SUMMARY

REMEMBERING BAYSIDE TRAILS:
Some recalled enjoying the trail system, while others, in particular people who live adjacent to it, recalled multiple problems including undesirable and illegal activities.

CONCERNS:
There were many concerns expressed regarding both the current situation and the potential of a reopened trail system. Key concerns include: Crime, homeless encampments and drug use; the need for stormwater management; slope instability; the impacts of invasive vegetation; vandalism; and, trespassing. In addition, there are concerns about and the inherent challenges of monitoring and maintaining a trail system in this location, and the city's ability to fund, design and maintain a trail system that will avoid the problems that have occurred in the past.

10 YEAR VISION:
There was strong support for improving Schuster Parkway to serve as a high capacity multi-use trail to complete the "Dome to Defiance" connection. There was also strong agreement on the importance of vegetation management to restore the health of the habitat of the Schuster Parkway slope.

There was a divergence of opinion on the issue of public access within the Schuster slope area. There was strong support for creating pedestrian access from the Stadium District neighborhoods down to the waterfront in some manner, and strong interest in exploring more direct routes from top to bottom as opposed to linear trails along the slope. Many expressed the desire for public access to natural areas and to views of the water.

Opinion was divided about reopening the current trail alignment, with large numbers both opposed and in favor. While many supported public access to the slope area, a significant number felt that access should only be along the top and bottom of the slope (on S. Stadium Way and Schuster Parkway), with no public access within the slope area. There was substantial support for access/routes to the waterfront within two specific areas: Below South Stadium Way, and within Garfield Gulch. The middle segment (south from Garfield Gulch to Schuster Parkway) was more controversial.

OTHER COMMENTS:
Many expressed support for the city broaching this issue, though others expressed concerns about any consideration of reopening the trails. Comments on the conduct of the meeting were generally positive, though some felt more voices could have been heard.

DETAILED SUMMARY OF COMMENTS

In the summary below, City staff have organized the input by subject. The comments are sorted generally from the most widely held viewpoints down to those expressed by fewer individuals. For simplicity, we have sorted the level of concurrence (the number of individuals who expressed agreement out of the 65 in attendance and 4 emailed comments) into broad categories, as follows:

HIGH Concurrence – 25 or more people concurred
MEDIUM Concurrence – 11-24 people concurred
LOW Concurrence – 1-10 people concurred

REMEMBERING BAYSIDE TRAILS

QUESTION: For those who utilized the trail while it was open, what were your experiences?

- Had bad experiences with trail - MEDIUM
  - Enjoyed trail, but safety concerns were a problem
  - Watched kegs of beer being rolled downhill
  - Undesired uses-kids and sex, drug selling and use
  - Homeless encampments
  - Police don't show up when called

    - Would not have bought house in retrospect
- Have positive memories of the trail - MEDIUM
    - Ran once per week or more
    - Walked or hiked the trail
    - Enjoyed the views

CONCERNS

QUESTION: What are your concerns about this area, both as it exists today and as a potential trail system?

ILLEGAL AND UNDESIRABLE ACTIVITIES

- Crime – burglary, drug use and sales - HIGH
- Homeless encampments - HIGH
- Trash, drug paraphernalia (especially needles) - HIGH
- Opening the trail would invite more - HIGH
- Law enforcement - HIGH
- Under-aged drinking/partying - MEDIUM
- Trespassing: Multiple instances of trespass for homes closest to the trail (before and after closure) - MEDIUM
- Vandalism of facilities/amenities - LOW

VEGETATION MANAGEMENT

- Invasive plants need to be removed and replaced with appropriate natives - HIGH
- Invasive plants weaken trees and contribute to slope instability - LOW
- Trees on slopes contribute to/cause erosion - LOW
- Trees do not cause erosion, leaning trees a symptom of slope instability - LOW

STORMWATER MANAGEMENT

- Stormwater leads to erosion/jeopardizes homes - HIGH
- City doesn't take care of the stormwater issues - MEDIUM
- Stormwater system needs maintenance/access for maintenance - MEDIUM
- Stormwater is a challenge for opening a trail - LOW
- Trail is very wet "turns into a stream" in one area - LOW

TRUST/CONFIDENCE IN CITY MANAGEMENT

- Is the City able and willing to build, maintain and monitor a trail as needed to prevent recurrence of the problems? - HIGH
- How can we trust that the City to keep the trail safe and prevent criminal activities? - HIGH
- The City has liability associated with the trail - MEDIUM

FUNDING AND COSTS OF A TRAIL

- Where would money come from for trail maintenance/monitoring? - HIGH
- Where will funding for construction come from? - MEDIUM

A WISE INVESTMENT OF RESOURCES?

- The current trail alignment is difficult to monitor and maintain - HIGH
- Concern about doing same project and getting same results - MEDIUM
- There are more pressing needs than reopening the trail - MEDIUM
- Trail restoration would be complex/long-term - LOW
- Wetlands/streams would add cost and complexity - LOW

SLOPE INSTABILITY

- Creates risks for property owners - MEDIUM
- Poses challenge for potential trail system - MEDIUM
- Slides onto Schuster Parkway are a problem - LOW

FIRE RISK

- Access difficult for fire-fighting efforts - LOW
- Fire equipment couldn't get access to stop the huts from burning - LOW

RISK OF INJURY

- Risk of falling if the public has access to the area - LOW

10 YEAR VISION

QUESTION: What would you like to see in this area as you walk or drive by it, or as you utilize a potential trail or public access system?

DOME TO DEFIANCE CONNECTION

- The segment from the Foss Waterway to Ruston Way is the missing link in Tacoma's waterfront access - HIGH
- Completing this segment is Tacoma's highest priority for waterfront public access and non-motorized connectivity - HIGH
- The best approach is to develop a multi-use trail along Schuster Parkway - HIGH
- Bayside Trails is best the option for the Dome to Defiance connection - LOW

IMPROVE ACCESS ALONG SCHUSTER PARKWAY

- Improving ped/bike access along Schuster Parkway is a major priority - HIGH
- Develop a multi-use trail along Schuster Parkway - HIGH
- The Dome to Defiance connection should be a higher priority than the slope trail - HIGH
- A Schuster Parkway multi-use trail could be accessible to more people than the slope trail - MEDIUM
- A Schuster Parkway multi-use trail would serve more people - MEDIUM
- Access is not either/or – we could have a Schuster trail and a natural trail along the slope - MEDIUM
- Support for David Boe's drawing depicting the Schuster sidewalk higher and wider - LOW

SCHUSTER SLOPE PUBLIC ACCESS ALTERNATIVES

- Connecting the Stadium District to Schuster Parkway/the waterfront is a high priority - HIGH
- Create more direct access pathways from the top to the bottom of the slope, rather than linear trails—consider routes including stairs - HIGH
- Strong support for a trail connection from South Stadium Way down to Schuster Parkway - HIGH
- Strong support for the trail segment within Garfield Gulch (provides access to water/Old Town) - HIGH
- No public access within the slope area – provide access only along the top and bottom (along S. Stadium Way and Schuster Parkway) - MEDIUM
- Re-open the Bayside Trails in its previous alignment - MEDIUM
- A funicular should connect South Stadium Way to Schuster Parkway - LOW
- Provide multiple pedestrian access points from top to bottom of the slope - LOW
- Create a broader Bayside Trails network linking Ruston Way to multiple gulch trails - LOW

ACCESS TO NATURAL ENVIRONMENT WITHIN CITY

- Natural areas are distinctive features of the city that should be maintained and available for public access - HIGH
- Want opportunity to be in natural setting within the city - HIGH
- Should have hiking options close by and within the city - MEDIUM
- Essence of Tacoma – nature and human relationship - LOW

HABITAT RESTORATION

- Restore habitat and remove invasive plants along the slope - HIGH
- The City should support volunteer efforts to restore natural areas - HIGH
- Remove only non-native plants on the South Stadium Way slope, then replant with mixture of native coniferous trees arranged to provide view corridors, native ground cover and shrubs - LOW
- More animals - LOW
- Do not clear trees to provide 180 degree views - LOW

PUBLICLY ACCESSIBLE VIEWPOINTS

- Public views are very valuable - MEDIUM
- Bayside Trails affords a rare opportunity for the public to enjoy great water views - MEDIUM

SAFETY AND MAINTENANCE

- Any trails/public access must be safe and maintained - HIGH
- Need neighbors support - MEDIUM
- Some access to the area is needed for maintenance/safety - MEDIUM
- “Broken windows” – neglected spaces breed problem behaviors - MEDIUM
- A well-designed and well-maintained trail would improve safety - MEDIUM
- A reopened Bayside Trails can be designed differently than the previous system to address concerns - MEDIUM

SPECIFIC TRAIL FEATURES

- Implement Crime Prevention Through Environmental Design (CPTED) principles - HIGH
- Use signage, fencing, planting and other features to protect privacy of houses near trail - MEDIUM
- Interpretive elements- LOW
- Provide trailheads with parking - LOW
- Bayside Trails should meet ADA requirements - LOW
- Should be built not for truck widths but for smaller vehicles to reduce impacts - LOW
- What about combination locks that would allow the people that know the combination to access the trail? - LOW
- Bikes are not appropriate - LOW

COMMENTS RELATED TO PROCESS

- Better conducted meetings mean more voices - HIGH
- Concerned about any process that would lead to trail reopening - HIGH
- Thought this meeting was successful - MEDIUM
- Glad the discussion is beginning - MEDIUM
- The mandate to fulfill the state grant terms offers an opportunity to freshly look at some neglected open space/mobility issues - LOW
- Approach the issue as a design project – Create clear design criteria, such as accessibility, grade separation, visibility (into and from), and others - LOW
- Call for collaboration amongst diverse opinions - LOW
- There are different attitudes now in Tacoma – more ownership and community spirit may lead to different outcomes than in past - LOW
- Do not consider another study by an outside agency of these very well known and very local issues - LOW

OTHER ISSUES

- The S-7 zone should remain industrial - LOW
- The ships should not remain in their current location at Sperry Dock - LOW
- There are issues and inconsistencies related to permitting for wetlands and streams - LOW

QUESTIONS:

The following questions came up at the meeting.

- Will changes planned for South Stadium Way affect the vegetation on the slope?

  Phase 1 of the Stadium Way Arterial Project will not include any work outside the right-of-way. In the future Phase 2, the City is considering installing geotechnical soil stability features in a certain area of the hill. As a result a number of trees would need to be felled. When Phase 2 begins, environmental permitting would address the issues and identify required mitigation actions.

- Why was cutting of vegetation allowed when the City recently accessed the trail? What mitigation venues are in place for those impacts and future critical areas impacts?

  The City cleared a pathway to access an overgrown area of the trail just south of Garfield Gulch in order to assess how and whether trail maintenance should occur. Misty Blair, Environmental Specialist for the City of Tacoma, conducted a site visit and determined that there were no critical areas in the vicinity of the area where vegetation was removed. In addition, trail maintenance has an exception in the Critical Areas Preservation Ordinance (CAPO) to permitting requirements.

- What is the liability to the City for the trail?

  At this time the trails are closed. Future reopening of this or an alternative trail alignment will be done in full consultation with the City's legal and risk management staff.

- What is the Washington (Recreation and Conservation Office) RCO's position in regards to the trail closure?

  Per Karl Jacobs of RCO, the current trail closure is a compliance issue that requires resolution. Options for the City include:

  1) Permanent Closure: This would trigger a "conversion" which requires acquisition of replacement property of equal current fair market value and utility. This option is not recommended.
  2) Request Declaration of Obsolescence: Document that the facility is beyond its useful life. The City would no longer be obligated to maintain the trail system, but the property must be maintained in some form of public outdoor recreation use.
  3) Resolve the Compliance issue: Re-open in whole or in part the Bayside Trails. The City is encouraged to pursue grant funding from the RCO, if it chooses this option.

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memorandum

date June 30, 2011

to Stephen Atkinson, Associate Planner

from Teresa H. Vanderburg, MS, PWS

cc Alex Cohen AICP and Ikuno Masterson AICP

subject Critical Areas, Tacoma SMP Update 2011

Environmental Science Associates (ESA) has prepared this technical memorandum in response to comments to the City of Tacoma Planning Commission related to the Draft Shoreline Master Program (SMP) Update. These comments are specifically in reference to the use of buffers on Commencement Bay and the waterways. This memorandum provides background information related to the history of the changes to the City's Critical Areas Preservation Ordinance (CAPO) and the best available science used in the development of the marine critical fish and wildlife habitat protection standards. ESA has assisted the City with both the update to its CAPO and the SMP. We have provided input and guidance on both these efforts since 2007.

The City of Tacoma began an update to its CAPO in 2003. Under the requirements of the Growth Management Act (GMA) the City was required to update its critical areas regulations in consideration of "best available science". The following actions occurred:

a) In 2004, GeoEngineers prepared a BAS review for all the city's critical areas (Report, Best Available Science Review, City of Tacoma, Critical Areas Preservation Ordinance, Tacoma, Washington, June 15, 2004);

b) On November 15, 2005, the City of Tacoma adopted amendments to Tacoma Municipal Code (TMC) Chapter 13.11 Critical Areas Preservation as required by the Growth Management Act;

c) On January 13, 2006, the Tahoma Audubon, Citizens for a Healthy Bay, People for Puget Sound and Futurewise petitioned the Central Puget Sound Growth Management Hearings Board alleging that the updated Critical Areas Preservation Ordinance (CAPO) was not in compliance with the GMA for failing to protect critical areas, specifically Fish and Wildlife Habitat Conservation Areas designated along Tacoma's marine shorelines.

d) On November 1, 2007, the Hearings Board ruled that the updated CAPO did not comply with GMA provisions (Case No. 06-3-0001) requiring the application of best available science (BAS), and for special consideration of measures necessary to preserve salmon. The CAPO was remanded back to the City to develop standards to protect functions and values of critical areas. The specific measure identified as lacking was buffers for marine waters.

e) In December 2007, ESA Adolfson was hired to assist the City review of their BAS for fish and wildlife habitat conservation areas.

f) In January of 2008, ESA prepared a report to update the BAS on Fish and Wildlife Habitat Conservation Areas, including marine fish and wildlife habitat conservation areas;

g) Over several months, ESA and City staff met with petitioners and various stakeholders to understand the issues. ESA then prepared a Draft Shoreline Inventory to document existing conditions within the Tacoma shoreline. This Final Draft report is dated December 2007.

h) Based upon the 2008 BAS report, the Draft Shoreline Inventory and the existing BAS in the record, ESA developed a system of protection measures (including buffers) for marine fish and wildlife habitat conservation areas to resolve the challenge and revised provisions in TMC Chapter 13.11 (CAPO).

i) In response to questions from the Planning Commission, ESA also prepared a technical memorandum that described the existing conditions within certain areas of the City's shorelines to document the urban conditions and existing riparian habitat and other ecological functions present (Existing Conditions in Selected Areas of Tacoma Marine Shorelines, May 15, 2008).

j) On July 1st, 2008 the City amended the CAPO and adopted a buffer system to comply with the Hearings Board order.

k) On August 7, 2008, the Hearings Board issued an Order of Compliance (Re: Ordinance No. 27728) based upon the City's record of Best Available Science, and states that the adoption of the ordinance complies with the goals and requirements of the GMA and enters a Finding of Compliance.

l) The 2008 CAPO amendment in Ordinance No. 27728 established the following buffer standards for marine critical areas according to Shoreline District (SD):
    - 200' from OHWM for areas approximating the existing S-3 and S-4 shorelines;
    - 115' from OHWM for areas approximating the existing S-2, S-5, S-6, S-7, S-11 and S-12 shorelines;
    - 50' from OHWM for areas approximating the existing S-1, S-8, S-10 shorelines as well as the Point Ruston and Slag Peninsula portions of the S-6.

m) Buffer standards for streams and wetlands were not appealed or changed during this process. These standards included:
    - 150' stream buffer from OHWM for the Puyallup River and Hylebos Creek
    - 300' wetland buffer for Wapato Lake and associated wetlands

During the GMHB challenge of the CAPO, the petitioners argued that although the City had designated all marine waters as critical fish and wildlife habitat conservation areas in Section 13.11.500 of the Tacoma Municipal Code, no protection measures had been provided for marine waters. The City had designated all "waters of the state" as critical areas, specifically habitats containing species present which are endangered, sensitive or priority. Priority salmonid species (including federally-listed Puget Sound ESU Chinook salmon) are found in the marine waters of Commencement Bay; therefore all marine waters were designated as Fish and Wildlife Habitat Conservation Areas.

Working with the City staff, petitioners and other stakeholders, ESA developed a tailored buffer system to protect marine fish and wildlife habitat conservation areas in Tacoma based in part on a more detailed review of existing land use conditions and ecological functions. It is recognized that although portions of the City of Tacoma are highly developed (i.e. Port industrial areas in Commencement Bay, Thea Foss Waterway) there are other areas with significant riparian habitat (i.e., Tacoma Narrows, Point Defiance). Larger riparian buffer widths were provided for areas with high riparian function and significant upland habitat (Brennan and Culverwell, 2004). For example, coastal bluffs along the Tacoma Narrows are greater than 200 feet tall; these areas were designated with buffers of 200 feet from the OHWM to protect coastal bluffs and marine life in Tacoma Narrows. Smaller riparian buffer widths were designated for industrial lands with little riparian function present. For example, in the working waterfront of Commencement Bay where little riparian vegetation exists today and therefore has limited habitat function, a minimum buffer standard of 50 feet was designated to protect marine water quality. A minimum setback of 50 feet was designated to provide separation between potential pollutant sources and marine waters.

According to NOAA Fisheries, the waters of Commencement Bay and Tacoma Narrows are designated critical habitat for Puget Sound Chinook and Puget Sound Resident Orca. It is documented that juvenile salmonids rear in the delta area of the Puyallup River in Commencement Bay and that the bay itself provides important rearing and migratory habitat for several species of salmon that spawn in the tributaries to the Puyallup River and the Hylebos (Simenstad, 2000). While shorelines are urban in nature throughout much of the City of Tacoma, the marine nearshore and waters do provide important critical habitats to federally-listed salmonid species and marine mammals.

During the SMP update process, the City has integrated its critical areas protections into the Draft shoreline program. No changes to the stream buffers have occurred during this process. Therefore, stream buffers for the Puyallup River and the Hylebos Creek remain the same as in the 2008 amended CAPO.

References:

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EnviroVision, Herrera and Aquatic Habitat Guidelines Working Group. October 2007. Protecting nearshore habitat and functions in Puget Sound – an interim guide. Olympia, Washington. Draft. 80+ pp

ESA Adolfson, 2007. Final Draft, Shoreline Inventory and Characterization, Tacoma, Washington. 150 pp.

GeoEngineers. 2004. Report, Best Available Science Review, City of Tacoma Critical Areas Preservation Ordinance, Tacoma, Washington. Prepared for City of Tacoma on June 15, 2004.

Simenstad, C. A. 2000. Commencement Bay Aquatic Ecosystem Assessment. Ecosystem-Scale Restoration for Juvenile Salmon Recovery. University of Washington, School of Fisheries. Seattle, Washington. 25p.

Vanderburg et al., 2008. Technical memorandum dated January 30, 2008 from Teresa Vanderburg, Lara Thoreson and Scott Olmsted, ESA Adolfson to Molly Harris, City of Tacoma, Fish and Wildlife Habitat Conservation Areas in the City of Tacoma, Washington.

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memorandum

date January 30, 2008

to Molly Harris, Sr. Planner, Tacoma

from Teresa Vanderburg, Lara Thoreson, and Scott Olmsted

subject Fish and Wildlife Habitat Conservation Areas in the City of Tacoma, Washington

ESA Adolfson (Adolfson) is pleased to present this technical memorandum outlining our review of the "best available science" for the City of Tacoma related to Fish and Wildlife Habitat Conservation Areas. This review is required by the Washington Growth Management Act (GMA) of 1991, as amended in 1995, which requires all counties and cities to include the "best available science" in developing its policies and regulations to protect the functions and values of critical areas (RCW citation?). The state provided guidance on the criteria for determining which information is to be considered the best available science (WAC 365-195-950).

This memorandum adds to the previous "best available science" report completed by GeoEngineers in 2004 supporting an update to the Critical Areas Preservation Ordinance (CAPO). The City of Tacoma adopted new regulations addressing the designation and protection of critical areas within the City in 2006. This is identified as Chapter 13.11 of the Tacoma Municipal Code (TMC). The updated CAPO was subsequently challenged before the Central Puget Sound Growth Management Hearings Board. The challenge stated that although the CAPO had designated Fish and Wildlife Habitat Conservation Areas, the City had not provided standards or protection measures (i.e., buffers, management recommendations, etc.) to protect functions and values. The specific measure identified as lacking was buffers for marine waters where considered Fish and Wildlife Habitats Conservation Areas (FWHCA).

Adolfson has prepared this memorandum to provide a review of the "best available science" to date relating to the protection of fish and wildlife species and habitats documented in or likely to be within the City of Tacoma. Therefore, we have focused this work on scientific literature that applies to FWHCAs documented to occur within the urban environment of Tacoma and new information available after 2004.

We have relied upon a number of scientific studies and documents to prepare this memorandum. First and foremost, the Draft Shoreline Inventory & Characterization Report (ESA Adolfson, July 2007) was used to review existing conditions within the shoreline jurisdiction of Tacoma. This report synthesizes data, summarizes results of existing studies, and provides GIS analyses for the designated "shorelines of the state" in the City, including information on FWHCAs found within the shoreline environment. The Draft inventory has been reviewed and commented on by the City's shoreline technical advisory group, which includes the petitioners and other interested parties. The Draft report was then revised to respond to comments from this group and the public.

References related to FWHCAs and used to provide this review are provided at the end of this memorandum, which supplements the references used in the 2004 review of "best available science." Citations are provided throughout the text for references to applicable scientific literature.

Fish and Wildlife Habitat Conservation Areas

FWHCAs are designated in the GMA and include sensitive and threatened species, priority species and certain critical habitat types. In Tacoma, FWHCA are designated and addressed in TMC 13.11.500 of the CAPO. FWHCAs are also listed in Appendix X (Example Code) of the Washington State Community, Trade and Economic Development (CTED) publication entitled – Critical Areas Handbook (CTED, 2003). It should be noted that stream protection measures are not included in Chapter 13.11.500 with other FWHCAs (as in CTED example code for the state); rather, they are addressed separately in TMC 13.11.400 (Streams and riparian habitats). Therefore, streams, freshwater riparian buffers and other protection measures will not be addressed in this memorandum.

According to the TMC, FWHCAs designated in Section 13.11.510 (Classification) may include the following:

- Priority habitats and species;
- All public and private tidelands or bedlands suitable for shellfish harvest;
- Kelp and eelgrass beds and herring and smelt spawning areas;
- Natural ponds under 20 acres and their submerged aquatic beds;
- Waters of the State as defined in WAC Title 222;
- Lakes, ponds, streams and rivers planted with game fish; and
- State natural area preserves and natural resource conservation areas established and managed by the Washington Department of Natural Resources.

In addition, minimum FWHCAs are designated in 13.11.510 A2. These habitats are:

- Lands containing endangered or threatened species or habitats for endangered or threatened species; and
- Streams containing salmonids.

As part of this "best available science" review, the Priority Habitats and Species database, as well as other state databases, were queried to develop a working map of FWHCAs designated and documented in the City. This map is GIS based and included Washington Department of Natural Resources Shorezone data, Department of Health shellfish data, water typing data, and City of Tacoma Habitat Zones. The state of the science for FWHCAs is provided below:

Priority Habitats and Species

Priority habitats and species (PHS) are documented and maintained in a database by Washington Department of Fish and Wildlife (WDFW). PHS information identified in the 2007 database includes the documented presence of the following priority habitats and species in the City of Tacoma:

1. Bald eagle
2. Purple martin
3. Peregrine falcon
4. Great blue heron
5. Mountain quail
6. Wood duck
7. Osprey
8. Seabird colonies
9. Waterfowl concentrations

10. Pigeon guillemot
11. Seals and sea lions
12. Orca
13. Reticulate sculpin
14. Anadromous fish
15. Oak woodland

Each of these species or habitats is herein described and a summary of the management recommendations by Washington Department of Fish and Wildlife (WDFW) is provided. ESA Adolfson recognizes that Tacoma is an urban environment and not all habitats described below are found within the City limits.

Bald Eagle

General Information

The bald eagle (*Haliaeetus leucocephalus*) is a bird of prey and is considered a State Threatened species in Washington. The Bald eagle is vulnerable to loss of nesting and roosting habitat, and is sensitive to human disturbance, primarily from development and tree removal along shorelines. Their nests are generally located in the tops of large coniferous trees near open water. Bald eagles are known to feed upon fish and small mammals. This species was removed from the federal Endangered Species List on June 28, 2007 by the U.S. Fish and Wildlife Department; but are still regulated under the WAC 232-12-292, Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Location

The PHS data show several bald eagle nests generally located along the Puget Sound shoreline in the vicinity of Point Defiance Park (Shoreline District 4 and 5) and Browns Point. In addition, shoreline areas in the vicinity of these nests sites are documented forage habitat for bald eagle.

Threats/Impacts

The main threats to bald eagles include loss of habitat, human disturbance, and lack of adequate food supply (Larsen, 2004). Loss of habitat is attributed to development and logging. Human disturbances range from construction to public viewing. Food shortages can be attributed to declining salmon runs.

Recommended Protections

The state Bald Eagle Protection Act (WAC 232-12-292) requires a bald eagle management plan for proposed activities involving lands containing or adjacent to an eagle nest or communal roost. There are currently three options available for bald eagle management plans in Washington (Watson and Rodrick, 2000):

1. Federal or State Landscape Plans - If a landowner is developing a federal Habitat Conservation Plan (HCP) or a state Landowner Landscape Plan (LLP), WDFW can assist with a long-term conservation strategy for bald eagle habitat. If the strategy is approved by WDFW, then a separate bald eagle management plan is not necessary for each action within the area covered by the HCP or LLP.
2. Custom Plans - A WDFW biologist will work with landowners to develop custom site management plans for forest practice, shoreline, or hydraulic permits; and for subdivisions, short plats, and planned unit developments. A landowner may develop his or her own site specific plan, or hire a consultant to do so, for approval by WDFW.
3. Generic Plans - WDFW may provide local government permit offices with generic bald eagle site management plans. Landowners may use these generic plans for septic, clearing, grading, road-building (if a DNR permit is not required) and single family home construction. If landowners cannot comply with the generic plan, or if a subdivision or planned unit development is intended, they should contact WDFW for a custom plan (see 2, above).

WDFW outlines multiple habitat elements that must be addressed in the bald eagle management plan. These include: breeding habitat, tree and stand structure, human disturbance, timing of construction and seasonal limits, visual screening, windthrow potential, and buffer distances. Since bald eagle typically use and maintain the same nests year after year, nests and nest trees must be protected year-round. WDFW recommends seasonal limits to construction to avoid the critical breeding period of January 1 through mid-August. Two buffer zones around each nest are also recommended by WDFW: A protected zone to provide screening of a minimum of 400 feet, and a conditioned zone to protect the inner zone extending 330 to 800 feet beyond the protected zone (Watson and Rodrick, 2000).

According to WDFW management guidelines, elements to be addressed by bald eagle management plans include, but are not limited to (Watson and Rodrick, 2000):

1. Designate a habitat management zone for nesting bald eagle that is within ¼ mile of the marine shoreline of Washington, and includes the shoreline of major rivers and lakes.
2. Maintain as many mature trees as possible to protect forage, perches, alternative nest and roost habitat.
3. Avoid tree cutting, use of heavy equipment, pile driving and blasting within 800 feet of nests during the critical breeding season.
4. Maintain high tree density and cover to visually buffer bald eagle nests from human activities.
5. Protect nests and nest trees year round.
6. Buffer trees using the two zone system described above.
7. Place seasonal restrictions on construction activities to avoid the critical breeding period of January 1 through August within 800 feet of nest trees.

Lastly, the WDFW recommends scrutiny of development proposals that increase pedestrian activity within 800 feet of nests.

Purple Martin

General Information

The purple martin (*Progne subis*) is the largest North American swallow and is a State Candidate Species. They are cavity nesting birds and rely on insects for food (Larsen, 2004). In Washington, purple martin breed on freshwater lakes, near the waters of Puget Sound, along the Strait of Juan de Fuca, on the southern Pacific coastline and near the Columbia River (Hays and Milner, 2003).

Location

The PHS data for Tacoma show that Purple martin habitat is generally located at the mouth of the Port facilities at Commencement Bay and in the vicinity of Shoreline District 1, 2, 8, and 12. The most recent documented citing was in 2001. Purple martin often nest in cavities within decaying pilings and other wood structures.

Threats/Impacts

Development has decreased the number of available nesting sites for purple martin, as well as competition for nest sites from non-native, invasive species such as starlings and house sparrows, which are found in developed areas. Purple martin populations began decreasing in the 1950s and were nearly extirpated by 1980. In urban areas, purple martins mostly nest in man-made nest-boxes adjacent to open water and wetlands.

Recommended Protections

The Washington Department of Fish and Wildlife recommends the following management guidelines (WDFW, 2005a):

1. Pilings with known purple martin nests in standing water and snags (especially snags near water) should be protected and left standing.

2. Retain snags near saltwater or wetlands during timber harvesting operations and during salvage operations after burns, blow-downs, and insect infestations.
3. Snags can be created in forest openings, or at forest edges (e.g., by topping trees) where nesting cavities are lacking, especially within 10 miles of existing purple martin colonies.
4. Because northern flickers and pileated woodpeckers excavate cavities used by martins, managing for these species will indirectly benefit martins (see Management Recommendations for Washington's Priority Species: Pileated Woodpecker for additional management guidelines).
5. If natural sites are lacking and cannot be provided by manipulating habitat, artificial nesting structures can be provided. New colony establishment through the use of artificial nesting structures is only recommended if these structures will be maintained over time.
6. If pesticides are to be used in areas inhabited by martins, refer to www.wdfw.wa.gov/hab/phs/vol4/appndxa.pdf for useful contacts to assess the use of pesticides, herbicides, and their alternatives.

Peregrine Falcon

General Information

Peregrine falcon (*Falco pererinus*) is a locally important raptor that has historically experienced a reduction in reproduction due to the use of pesticides. Peregrine falcons are a State Endangered Species as a result of population decline over several decades (Hays and Milner, 1999). This species is recently increasing in population due to the ban on use of chlorinated hydrocarbon pesticides. Nest sites are generally on cliffs or bluffs away from human disturbance (Pacific Coast American Peregrine Falcon Recovery Team, 1982; Towry, 1987) and near water (food source). Peregrine falcons can range up to 15 miles hunting for food (Towry, 1987) and can be tolerant of urban conditions.

Location

The PHS data notes a peregrine falcon Wildlife Heritage point located near the southeastern boundary of the City limits, along Swan Creek a tributary of the Puyallup River. Peregrine falcon may also nest on the 11th Street Bridge within Shoreline District 8.

Threats/Impacts

Threats facing the peregrine falcon stemmed from the loss of habitat, limited access to food resources, and use of chlorinated hydrocarbon pesticides that resulted in thinning egg shells and caused poor hatching success and survival of young (Snow, 1972; Peakall and Kiff, 1988).

Recommended Protections

WDFW lists the following management recommendations to help avoid and minimize impacts to peregrine falcons (WDFW, 2005b):

1. Route powerlines away from nests wherever possible.
2. Strictly protect wetlands (especially intertidal mudflats, estuaries, and coastal marshes) used regularly at any time of the year by peregrine falcons from filling, development, or other excessive disturbances that could alter prey abundance.
3. Do not apply pesticides where winter prey species congregate (especially intertidal mudflats, estuaries, and coastal marshes).
4. Maintain all large trees and snags in areas where peregrine falcons are known to feed in winter.
5. Retain snags and debris located on mud flats for winter perching and roosting.
6. Peregrines can tolerate human presence at wintering sites if they are not harassed and if abundant prey remains.
7. Avoid applying pesticides around occupied peregrine nests during the breeding season.

Great Blue Heron

General Information

Great blue heron (*Ardea herodias*) are found state-wide, usually foraging near fresh and saltwater wetlands, rivers, and seashores. Great blue heron populations have been declining for decades due to development and sensitivity to disturbance (Quinn and Milner, 1999). During the breeding season, herons tend to aggregate with other breeding pairs to form rookeries (Quinn and Milner, 1999).

Location

According to the PHS data, a great blue heron Wildlife Heritage point is located near the eastern boundary of the City limits, in the vicinity of the Hylebos Waterway in Shoreline District 11. The most recent documented sighting occurred in 2007.

Threats/Impacts

Threats facing the heron include limited available nesting habitat in proximity to suitable foraging habitat. Additionally, great blue herons may abandon nest in response to development or other human activities (Leonard, 1985; Parker, 1980; Kelsall and Simpson, 1979; Werschkul et al., 1976; English, 1978). Heron can experience reduced reproductive success due to noise or disturbance near the rookery during the nesting season from February through August.

Recommended Protections

WDFW lists the following management recommendations to help avoid and minimize impacts to Great blue heron (WDFW, 2005c):

WDFW recommends that land use planning should protect existing great blue heron colonies using colony site-specific management plans that consider the colony size, location, relative isolation and the degree of habituation to human disturbance. WDFW biologists can assist those that are developing a plan.

General Recommendations:

In the absence of a colony site-specific management plan, adhere to the following general guidelines:

1. Assure retention of several alternate forest stands at least 10 ac in size with dominant trees at least 56 ft tall within 2.5 mi of nesting colonies (Colonies with > 50 nests will require a greater number of stands).
2. These protected stands will need to be surrounded by a 328 ft buffer where human disturbance is restricted.
3. If pesticide use is planned within 2.5 miles of a known heron colony or feeding area, consult Appendix A of the Priority Habitat and Species bird volume (see http://wdfw.wa.gov/hab/phs/vol4/appndxa.pdf) for contacts to help assess the use of pesticides, herbicides, and their alternatives.

Buffers:

The following buffers from active heron rookeries are recommended for specific activities:

1. Seasonal limit to human activities, construction or vegetation removal during the breeding period of February 15 through July 31 – 820 to 985 feet from outer most nest tree.
2. Aircraft flight or fly-overs during the same breeding period – 2130 feet.

Mountain Quail

General Information

Mountain quail (*Oreortyx pictus*) have been introduced to Washington and occupy a variety of habitats composed of tall, dense cover and slope as great as 20 to 60 percent (Miller, 1950; Gutiérrez, 1975; Gutierrez, 1980; Johnsgard, 1973; Brennan, 1993). These birds seek brush, hardwood or conifer forest for nesting. Mountain quail are uncommon to western Washington and are experiencing population declines in the eastern part of the state due to poor habitat quality. These quail rely on brushy habitat associated with riparian zones and are not able to travel far in search of more suitable habitat (Ware, Tirhi, and Herbig, 1999).

Location

The PHS data includes one mountain quail Wildlife Heritage point in Tacoma located near the southwestern end of the Thea Foss Waterway. The mountain quail was observed in 1993 according to PHS data and no current use has been documented. However, this data is still included in the 2007 PHS database.

Threats/Impacts

Habitat loss and limited access to food resources are the main contributors to declining mountain quail populations (Miller, 1950). In dry, eastern parts of the state, water loss and degradation of riparian habitat have impacted quail populations (Gutiérrez, 1975; Miller and Stebbins, 1964 *in* Gutiérrez 1975; Kessler, 1990a).

Recommended Protections

WDFW lists the following management recommendations to help avoid and minimize impacts to mountain quail (Ware, Tirhi, and Herbig, 1999):

1. Tall, dense cover (covering 20 to 50% of the ground area) in close proximity to water sources should be retained in areas where mountain quail management is a priority.
2. Protect riparian brush communities within the range of the mountain quail.
3. Encourage the use of integrated pest management within the mountain quail primary management zone. Refer to Appendix A of the Priority Habitat and Species bird volume (see http://wdfw.wa.gov/hab/phs/vol4/appndxa.pdf) for contacts useful when assessing pesticides, herbicides, and their alternatives.
4. Public education should be encouraged where managing for mountain quail is a priority, and should target habitat removal and water diversion issues associated with residential development. The avoidance of placing bird feeders in open areas highly visible to predators should also be addressed.
5. Minimize livestock use of riparian habitat.
6. Encourage the planting of multiple tree and shrub species and/or allowing natural regeneration in areas subject to timber harvest.
7. Install watering devices where water is lacking in or near dense cover.

Wood Duck

General Information

The wood duck (*Aix sponsa*) is a cavity nesting duck species. They nest in large snags and pileated woodpecker cavities in trees that range from 12-inch diameter at breast height (DBH) to 24-inch (Lewis, 2004) or in man-made nest boxes. Nesting habitat is generally found in late successional forests near wetlands with open water components and riparian areas. Juvenile wood ducks feed on insects and aquatic invertebrates. Mature wood duck generally feed upon aquatic plant seeds.

Location

One wood duck nest location is documented in the 2007 PHS data near the western City limit, north of State Route 16 in a designated wetland area.

Threats/Impacts
Threats to wood ducks include loss of habitat, foraging areas, and breeding sites, due to development, and shoreline development. Additionally, herbicide use near wetland areas decreases insects affects foraging opportunities. Wood ducks reproduction can be negatively affected by human disturbance (Lewis, 2004).

Recommended Protections
WDFW recommends (Lewis, 2004):

1. Ideal cavity nesting duck habitat contains shallow, wooded wetlands having 50 to 75% canopy tree cover with abundant downed logs and large woody debris or low islands. Wetlands with these characteristics should be preserved.
2. Preserve snags and cavity trees near suitable wetlands (i.e., shallow wetlands within 0.5 mi of cavities) to achieve a minimum density of 5 potential nest cavities/ac. In general, the nest tree and cavity characteristics listed below will accommodate all species:
    - a minimum snag diameter of 12 inches although a diameter of 24 inches is preferred
    - an elliptical entrance hole at least 3.5 inches in diameter (buffleheads may prefer smaller cavity entrances that are 2.5 inch diameter)
    - an internal cavity 10 inches deep and 7.5 inches in diameter
    - cavities 6 to 49 feet above the ground or water are generally preferred, although cavities above 66 inches in trees will be used
    - the canopy around a cavity should be open and not overhang the entrance
3. Large woody debris and large downed logs should be present, as well as low islands for breeding and brood use.
4. Do not remove partially submerged timber or woody vegetation along the shores of nesting and brood areas. Partially submerged or downed timber may be used to create snags and brood habitat in certain situations.
5. Maintain nut-bearing trees such as oak and hazelnut in areas used by wood ducks.
6. Predator-proof nest boxes for cavity nesting ducks can be used in areas where natural cavity sites are limited. Boxes should be separated at least 150' from one another to minimize predation. Information on construction and placement of cavity duck nest boxes can be viewed on the Ducks Unlimited website at http://www.ducks.org/conservation/duck_box_plans.pdf.

Osprey

General Information
The osprey (*Pandion haliaetus*) is a raptor often seen near coastal areas and larger rivers. They nest from April through October and depend on fish for their main food supply. Nesting sites are located near fish-bearing waters. Nests are made in dominant snags or trees with flat or broken tops that are at least as high or higher as surrounding trees or on manmade structures (e.g., pilings, utility towers). Nesting pairs commonly return to the same nest (WDW, 1991).

Location
The PHS data includes an osprey Wildlife Heritage point located near the southern end of the Blair Waterway on Commencement Bay.

Threats/Impacts
Similar to the peregrine falcon, osprey populations have historically experienced declines due to pesticides that resulted in eggshell thinning. Since the ban of DDT in 1972, osprey numbers have increased along with the aid of artificial nest platforms. Shoreline development and human disturbance affect sustainability of breeding pairs as some osprey that are not used to humans may be more sensitive to disturbance especially during incubation.

Recommended Protections (WDW, 1991)

1. Restrict all human activities within 660 feet of any active osprey nest between April 1 and October 1.
2. Establish a "no-cut" zone within 200 feet of each nest.
3. Retain 3-5 live or dead dominant trees and young recruitment trees within 660 feet of nest tree.
4. Do not cut trees within 660 feet around bodies of water associated with osprey nests.
5. Maintain two dominant live trees suitable for nesting for 3.2 km beyond the "restricted cutting" zone around water bodies associated with osprey nests.
6. Close roads between April 1 and October 1 if birds cannot tolerate disturbance.
7. Do not apply chemicals to any watershed used by ospreys.

Seabird Colonies

General Information

Seabirds identified as priority species by WDFW include (WDFW, 2006) include a variety of species of petrels, cormorants, oystercatcher, gulls, terns, common murre, tufted puffin, pigeon guillemot and auklet. Glaucous-winged gull (*Larus glaucescens*) and pigeon guillemot (*Cepphus columba*) are the only seabirds specifically identified within the City of Tacoma. All of the species are colonizing marine birds, which tend to congregate along rocky shorelines.

Location

Several seabird colonies are documented in the PHS database as occurring within Tacoma. Seabird colonies are located near Hylebos, Milwaukee, and St. Paul Waterways, and within Shoreline Districts 6, 7, and 12.

Threats/Impacts

Oil spills, pollution, invasive species, gill-netting, loss of habitat and habitat degradation, human disturbance, and climate change are some of the threats to these species (WDFW, 2006; Mills et al., 2005). Weather trends may also be affecting seabird populations and distribution. In 2006, in an unusual and unexplained weather pattern, ocean currents did not bring food supply, resulting in the death of thousands of birds that were washed up on California, Oregon, and Washington beaches.

Recommended Protections

No WDFW protection measures provided. Avoid disturbing congregating species by not boating near them and keeping dogs on leashes while on the beach.

Waterfowl Concentrations

General Information

Waterfowl concentrations as defined in the PHS database may include a wide variety of ducks, geese, or other waterfowl. Waterfowl species are attracted to the large, seasonally inundated pastures and emergent wetlands. The wetland areas tend to be used in the winter or early spring when shallow flooding is present.

Location

Waterfowl concentrations are documented in the 2007 PHS data in the vicinity of Tacoma. These occur just south of the City in the Wapato Creek floodplain where agricultural practices exist.

Threats/Impacts

Filling or alteration of large emergent wetlands is the main threat to this habitat. Alterations may also include ditching or draining of shallowly flooded areas.

Recommended Protections

No management recommendations have been provided by WDFW. However, protection measures for wetlands will provide protections for this priority habitat type.

Pigeon guillemot

General Information
The Pigeon guillemot (*Cepphus columba*) is a seabird that is found along the west coast of North America from Alaska to California. They forage for fish and other aquatic invertebrates by diving and swimming underwater, diving up to 150 feet. This species of alcid colonizes along rocky shorelines and cliffs. Nest locations vary from rocky crevices to under driftwood but tend to not change from year to year.

Location
The PHS data shows a pigeon guillemot Wildlife Heritage point located east of the Hylebos Waterway in Shoreline District 10.

Threats/Impacts
The pigeon guillemot is highly susceptible to oil spills, gill-netting, introduced mammal species, and changing water temperatures. Humans can disturb nesting by climbing on bluffs and bringing their dogs to the beach.

Recommended Protections (DOE, 2007)
The Department of Ecology recommends several management guidelines:

1. Do not climb on bluffs;
2. Keep pets close by when at the beach;
3. Do not boat near sensitive nesting/colonizing/feeding sites; and
4. Maintain native vegetative buffers on coastal cliffs.

Seals and Sea Lions

General Information
California sea lions, northern elephant seal, harbor seals, and Stellar sea lions are found in Washington state waters and have several haul-out sites in the Puget Sound waters off the City of Tacoma. Haul-out sites are used by these species to rest, digest food, give birth, or nurse young (DOE, 2007). Salmon are one of several fish species important to seal and sea lion diets (WDFW, 2007).

All marine mammals are protected under the Marine Mammal Protection Act, which has lead to a significant increase in California sea lion populations since the 1970s. A similar trend has been reported for northern elephant seals (Jeffries et al., 2000). Harbor seals are common to Washington waters, while Stellar sea lion populations have declined and the species is currently listed as threatened at both the federal and state levels (Jeffries et al., 2000; Ferrero and Fritz, 2002).

Location
A California sea lion PHS polygon is located about two miles northwest of Browns Point in Commencement Bay. Seal and sea lion haul-out sites are documented near Shoreline District 12. Seal and sea lion haul-outs have been documented along Tacoma's marine shoreline on buoys and logbooms in northeastern Commencement Bay (Jeffries et al., 2000).

Threats/Impacts
Changes in fisheries populations due to over-harvesting may have a negative impact on seal and sea lion populations. Other impacts may stem from environmental change (decreasing fisheries production and distribution) and human effects due to hunting and incidental take that decrease birth and survival rates of the

species. The same effect on birth and survival rates may be caused by urban and industrial pollution (Ferrero and Fritz, 2002).

Recommended Protections
No WDFW protection measures provided. Seal pups and other seals should not be disturbed on the beach. Keeping dogs off the beach and limiting public access to haul-out sites is encouraged.

Orca

General Information
The stock of Southern resident killer whales, otherwise known as Orca (*Orcinus orca*), inhabits the waters of Puget Sound from early spring until late fall (Ford and Ellis, 2002; Krahn et al., 2002). In the early fall, pods further expand movement into Puget Sound to feed on Chinook and chum salmon runs (Osborne, 1999). Killer whale presence in the Sound provides numerous opportunities for the region. Economically, whale watching on commercial boats has become a booming industry in recent years (The Whale Museum, 2006). Ecologically, Orca is situated at the top of the food chain, feeding on several species of salmon and bottom fish. Culturally, killer whales have been of great importance to native cultures around the Pacific Northwest.

Location
Two distinct types of killer whales are found in Puget Sound, with the Orca community consisting of three pods (Center for Whale Research, 2006). These pods reside in the inland waters of Washington State and southern British Columbia, but are known to range from Monterey, CA to Queen Charlotte Islands, British Columbia. Orca usually stay within 50km of the shore (Ford et al., 2005).

Threats/Impacts
Natural and human induced factors have lead to a reduction in the Orca population in Puget Sound. Reduction in prey populations (primarily salmon) due to El Nino and La Nina (Trillmich et al., 1991), along with over-harvesting and inappropriate hatchery practices is partially responsible for the decline of orca populations (Bledsoe et al, 1989; Ford et al., 2005; Ford and Ellis, 2005). In addition, pollution (Ross, 2006; Ross et al., 2004; Ueno et al., 2004) and disturbance from vessel traffic (Bain et al., 2005; Kriete, 2002; Walker, 2005; Davies, 2004; Foote et al., 2004; Morten et al., 2004; Erbe, 2002) have negatively impacted killer whales.

Recommended Protections
The following measures have been recommended to aid Orca restoration (Kriete, 2007):

- Salmon habitat restoration and salmon recover (Fresh, 2006).
- Safe salmon harvest and hatchery practices.
- Decrease (discontinue) dumping toxics such as persistent organic pollutants (PCBs, PBDEs, dioxins, furans) into the marine environment; clean up, if possible.
- International agreements regarding emission of toxics.
- Reduce the cumulative effect of whale watching through new laws and public awareness.

Reticulate Sculpin

General Information
Reticulate sculpin (*Cottus perplexus*) is a fish found along the west coast of North America from Washington to California. They feed on aquatic insect larvae and occupy slow water habitats in small coastal and headwater systems (Moyle, 1976; Bond 1963; CDFG, 1995). Reticulate sculpin are listed on WDFW Species of Concern: Washington State Monitor List.

Location
A reticulate sculpin Heritage Point is located on the Puyallup River, near the mouth of Swan Creek. This PHS data is located just outside the city limits of Tacoma.

Threats/Impacts
The reticulate sculpin is susceptible to poor water quality due to disturbance from human activities such as logging and development. Dams and other in-water construction activities can have detrimental affects on sculpin populations.

Recommended Protections
Reticulate sculpin is listed as a species of concern by WDFW and currently does not have any species recommendations. Management activities that improve water quality and protect the marine environment should be followed to help protect the species.

Anadromous Fish/Salmonids

General Information
Several species of fish and anadromous fish are considered priority species and reside in the Puget Sound or in the fresh waters of Tacoma (Kerwin, 1999). The 2007 PHS data identifies the following priority fish species in Tacoma:

- Bull trout (*Salvelinus confluentus*),
- Spring and fall Chinook salmon (*Oncorhynchus tshawytscha*),
- Cutthroat trout (*Oncorhynchus clarki clarki*),
- Winter steelhead and rainbow trout (*Oncorhynchus mykiss*),
- Coho salmon (*Oncorhynchus kisutch*),
- Fall and winter Chum salmon (*Oncorhynchus keta*),
- Kokanee and sockeye salmon (*Oncorhynchus nerka*), and
- Pink salmon (*Oncorhynchus gorbuscha*).

The Draft Shoreline Inventory and Characterization report also describes fish use in each of the shoreline waterbodies within the City (ESA Adolfson, 2007). Priority fish use is documented, within the Puyallup River, the Hylebos, Wapato Creek, and Puget Creek in Tacoma. The lower Puyallup River provides habitat for Chinook, pink, chum, and coho salmon, steelhead, and bull trout. Sockeye salmon are also observed in the Puyallup River. The lower portion of the Puyallup River contains Critical Habitat for the Coastal-Puget Sound Distinct Population Segment of bull trout (70 Federal Register 185) and designated Critical Habitat for Puget Sound ESU Chinook salmon (70 Federal Register 170).

Chinook salmon and Critical Habitat for Chinook are found in the Hylebos Creek within Tacoma, including the Hylebos Waterway. Fish species distribution maps (Salmonscape)(WDFW, 2006) and PHS 2007 data indicate

that the Hylebos Creek serves as a migration corridor for fall run Chinook salmon. Other salmon using the Hylebos include cutthroat trout, coho salmon, fall chum and winter steelhead.

Juvenile salmon of the Puget Sound use the near-shore environment of Commencement Bay as a transition between their freshwater spawning grounds and marine waters where they feed and mature. Five species of salmon spawn and rear in Puget Sound and their runs have become depleted throughout the region.

Location

Anadromous fish are documented in the PHS data as occurring along the shorelines of Puget Sound, in the Puyallup River, in Hylebos Creek, in Wapato Creek and at the mouth of Puget Creek. Juvenile salmonids congregate in Commencement Bay where important shallow rearing habitat exists at the mouth of the Puyallup River. Pocket estuaries near Puget Creek and other small streams provide important transitional habitats (Simenstad, 2000).

Threats/Impacts

Several factors have lead to declining salmon population abundance including over-harvesting of adult salmon. Shoreline armoring can reduce sediment abundance and local hydrodynamics. Over-water structures lead to declines in eelgrass beds (migration corridors) and alter beach sediment size (Williams and Thom, 2001; Nightingale and Simenstad, 2001). Stormwater or wastewater increase nutrient inputs and can force habitat shifts by animals due to algal blooms. Loss of riparian vegetation can increase water temperatures and increase sediment erosion (PSWQA, 2002; PSAT, 2005; Shared Salmon Strategy, 2007).

Recommended Protections

To protect anadromous fisheries and fish habitat, shorelines and nearshore marine habitats (including spawning areas, freshwater and marine rearing areas, migratory corridors) should be restored and protected along with efforts to rebuild salmon runs throughout this region (Magnusson and Hilborn, 2003; Greene and Beechie, 2004; Bottom et al., 2005; Greene et al., 2005; WAC 173-26-221).

Riparian buffers are important transitional areas that serve to protect stream habitats and river processes. Riparian buffers for streams have already been addressed in the 2004 review of "best available science" by GeoEngineers. Riparian buffers, where degraded, should be restored to provide riparian functions such as a source of large woody debris, nutrients, shading, water quality protection and habitat. Riparian buffers for streams are provided in the TMC 13.11.420 (Stream Buffers). Streams with salmonids present are designated as "Streams of Local Significance" and are provided a minimum 150-foot buffer. These streams include: Puyallup River, Hylebos Creek, Puget Creek, Wapato Creek and Swan Creek.

Oak Woodlands

General Information

Oak (*Quercus spp.*) woodlands provide important habitat for many species of wildlife. Insects, amphibians, reptiles, birds, and mammals use oak woodlands for feeding, resting, and breeding. Several species of oak grow in Washington, but Oregon white oak (*Quercus garryana*) is the only native oak to the state (Larsen and Morgan, 1998). Oregon white oak woodlands identified as Priority Habitats by WDFW consist of stands of pure oak or oak/conifer associations with oak canopy cover within the stand at least 25%; or where total canopy cover of the stand is greater than 25%, but oak accounts for at least 50% of the canopy cover present. In non-urbanized areas west of the Cascades, priority oak habitat consists of stands 1 acre in size. In urban or urbanizing areas, single oaks, or stands of oaks less than one acre, may also be considered a priority when found to be particularly valuable to fish and wildlife (Larsen and Morgan, 1998).

Location
An oak woodland priority habitat is located approximately 2.5 miles west of the southwestern limit of the City of Tacoma. According to Tacoma staff, other areas of oak woodland have been identified within the City limits, which are not documented on the PHS data.

Threats/Impacts
Oak woodlands are limited and declining due to a number of natural and human factors. Invasive, non-native species out-compete oak saplings, while sudden oak disease has been found in Washington nurseries, mainly in ornamental plants such as camellias and rhododendron (WSDA, 2007). The suppression of fire allows conifers (primarily Douglas fir) to overtop and shade out oak trees (Kertis, 1986). Urban development (Kessler, 1990), timber conversion (Reed and Sugihara 1987), and livestock grazing (Kertis 1986) also have significant negative impacts on oak woodlands.

Recommended Protections
The following measures have been recommended by WDFW to aid oak woodland restoration (Larsen and Morgan, 1998):

1. Do not cut oak woodlands except for habitat enhancement.
2. Allow only early spring, low-impact grazing.
3. Allow low-impact recreation (hunting, fishing, hiking, mushroom and acorn collecting).
4. Selectively harvest individual oaks to improve stand age-class and structural diversity.
5. Thin encroaching conifers in oak woodlands west of the Cascades.
6. Retain large, dominant oaks and standing dead and dying trees.
7. Create snags when thinning oaks or conifers instead of removing trees.
8. Leave fallen trees, limbs, and leaf litter for foraging, nesting, and den sites.
9. Retain contiguous aerial pathways.
10. Conduct prescribed burns where appropriate.

Tidelands and Bedlands Suitable for Shellfish Harvest

Shellfish

General Information
Washington has an abundant and diverse array of shellfish that inhabit the near-shore waters of the state. Species include crabs, clam, oysters, mussels, shrimp, geoduck clams, and others. These shellfish have ecological, economical, cultural, and recreational importance. Although population trend data is limited, population levels of several species (Olympia oyster and geoduck) have declined in recent decades causing concern for other species (Dethier, 2006).

Location
Shellfish beds are located along Shoreline Districts 1, 2, 4, 5, and the portion of Commencement Bay near Port facilities. Documented shellfish in Tacoma shorelines include crabs and geoduck clams. Crab resources are found throughout the inner Commencement Bay area as well as in deeper waters off of the Puyallup River delta. Dungeness crab is recreationally harvested in Tacoma. Two geoduck beds are documented in subtidal areas of Tacoma on Tacoma Narrows, south of the Narrows Bridge.

Threats/Impacts
Habitat loss and degradation threaten the current abundance of shellfish and their future existence in the region. Construction of Port facilities and commercial development has damaged and reduced available habitat

(Armstrong et al., 1993). Urban land-use activities alter sediment loads and size that are of significant importance to the settlement and growth of many species of shellfish (Dethier, 1990). Chemical changes to the water column attributed to terrestrial (industrial) and aquatic (dinoflagellate and algal blooms) activities, influence shellfish survivability (Lassus et al., 1999; Nelson, 2001; Nelson et al., 2003a, b). These chemical changes can also be detrimental to plankton, a major shellfish food source. Over-harvesting and introduced predator/parasite species are significant threats to sustainable shellfish populations.

Recommended Protections

The Puget Sound Action Team provides the following recommendations for preserving shellfish growing areas (PSAT, 2006):

1. Preserve forest cover near marine shorelines. Native vegetation and soils provide irreplaceable functions. Replant trees and amend soils in areas that have been cleared or damaged.
2. Preserve and restore wetlands and other natural drainages that naturally hold, absorb and slowly release water. These features help regulate the movement of water and the break down of pollutants.
3. Preserve continuous riparian corridors with mature, native vegetation to protect and buffer streams, shorelines and other water bodies.
4. Limit impervious surfaces—such as rooftops, concrete and asphalt—that generate stormwater runoff. Wherever possible, disconnect these surfaces from pipes and other drainage systems and use alternative materials and approaches to reduce runoff and promote onsite infiltration.
5. Prevent pollution. Pollution is hard to control and expensive to clean up. Take care of onsite sewage systems and wastes from domestic animals, boats and other fecal sources.
6. Manage growth. Direct population growth and development to urban growth areas. Limit development densities in sensitive watersheds and rural areas to preserve the value and integrity of these areas and the industries they support.
7. Plan for protection. Determine land uses based on long-term protection and use of water resources. Use local planning tools to tailor development policies and standards to needs and conditions in different areas.
8. Use appropriate infrastructure. Try to avoid development densities that require use of large-scale sewer systems. Instead, aim to use low impact development principles and practices and decentralized wastewater approaches that support rural density land uses in shellfish watersheds.

Kelp, Eelgrass and Forage Fish

Kelp and eelgrass

General Information

Kelp and eelgrass are marine aquatic plants that inhabit the nearshore environment (less than 20m for kelp; 10 m for eelgrass). Kelp is brown seaweed that anchors to bedrock or cobbles and occupies areas of moderate to high waves or current. Eelgrass produces flowers and anchors to sand or mud and is located in areas with weaker wave or current action (Mumford, 2007). Kelp and eelgrass are ecologically important in the nearshore environment. These plants are a major food source (detritus pathways) for many species of nearshore organisms and provide three-dimensional structure to the ecosystem. Kelp and eelgrass serve as nursery sites and habitat for invertebrates, shellfish, and fish and migration corridors for juvenile salmonids. Nearshore birds feed on organisms that inhabit kelp and eelgrass beds (Mumford, 2007).

Location

DNR Shorezone data document kelp and eelgrass in the marine shorelines of Tacoma. The data indicates patchy eelgrass along the entire shoreline near Ruston Way in Shoreline District 7, particularly near Puget Creek. Eelgrass beds are reported at Point Defiance and north of Brown's Point. Patchy eelgrass is also documented south of the Narrows Bridge in Districts 1 and 2.

Threats/Impacts
The sessile nature of kelp and eelgrass has made study of these plants frequent and their stressors well documented (Larkum et al., 2006; Short and Wyllie-Echeverria, 1996). Docks or other structures that shade out the plants, along with turbid water conditions are known to have a negative influence on plant success (Schiel et al., 2006). High and low nutrient levels allow competitive species to out-compete kelp and eelgrass or can result in conditions unsuitable for growth (Foster and Schiel, 1985; Hemminga and Duarte, 2000; Short and Wyllie-Echeverria, 1996). Deleterious impacts from oil and metal toxins can occur when beds are located in proximity to urban or industrial areas (Antrim et al., 1995; Dean et al., 1998; Steele and Hanisak, 1977; Thursby et al., 1993). Disturbance resulting from bed disturbance, boat propellers, or harvesting can have significant direct plant impacts. Indirect stressors include temperature change (warmer) and invasive species that have been documented to cause kelp and eelgrass decline.

Recommended Protections
Recommended protection measures for kelp and eelgrass rely on avoidance and minimization of disturbance. Dredging and other disturbance to subtidal and intertidal aquatic lands should be avoided to the extent possible. Mitigation for unavoidable eelgrass disturbance includes restoration or recovery of eelgrass beds. Because of the uncertainty surrounding methods involving transplanting whole eelgrass plants into the substrate (Fonseca et al., 1998; Calumpong and Fonseca, 2001; van Diggelen et al., 2001), two new techniques are being developed, although they have not been widely used in Puget Sound. The first involves the use of seeds (Pickerell et al., 2006). The second is the use of whole plants tied to frames (TERFS, transplanting eelgrass remotely with frame systems; available at www.edc.uri.edu/restoration/html/tech_sci/restseahtm).

As summarized by Stamey (2004) and others (Hershman and Lind, 1994; Fresh, 1994), both kelp and eelgrass are given regulatory protection under a variety of federal, state and local laws.

Forage Fish

General Information
Surf smelt, Pacific herring, and Pacific sand lance are common forage fish around the Pacific Northwest. These species use the nearshore habitat to spawn and as nursery sites. Depending on the species, only a small geographic area is used by each species to spawn, and is dependant upon sediment type, tidal heights, and vegetation. Forage fish are major prey species for larger marine fish, seabirds, and other marine wildlife (Penttila, 2007). Forage fish have been ecologically, commercially, and recreationally important for many years in the Pacific Northwest. Herring are import prey for species such as salmon and herons and have been important to recreational anglers.

Location
Pacific herring likely use the areas offshore of Point Defiance as a holding area prior to spawning in Quartermaster Harbor. Herring spawning is not documented in the Draft Shoreline Inventory (ESA Adolfson, July 2007), but they may use the nearshore areas of Districts 1 and 2 for feeding and migration. Surf smelt spawning has been documented only in a small section of Browns Point in the City's UGA. Pacific sand lance is documented in District 1 near Titlow Beach and along the eastern shore of Tacoma Narrows to Point Defiance. Sand lance spawning is also documented on the north shore of Browns Point.

Threats/Impacts
Shoreline armoring is a significant threat to forage fish because spawning sediments in the upper intertidal zone are replaced by hardened structures (Thom et al., 1994). Armoring also blocks or delays erosion of upland areas and bluffs that replenish spawning substrate (Johannessen and MacLennan, 2007; Williams and Thom, 2001). Other human impacts affecting forage fish habitat include placement of overwater structures, which can shade out vegetation and introduce chemicals to the spawning habitat (Penttila, 2002; Nightingale and Simenstad, 2001;

Vines et al., 2000). Dredging activities that remove marine vegetation and spawning sediments are also significant human impacts to forage fish populations. Additionally, dredging of the intertidal zone associated with commercial shellfish harvest removes forage fish spawning habitat (West, 1997).

Recommended Protections

The WDFW Hydraulic Code stipulates that the construction of bulkheads and other bank protection must not result in a permanent loss of forage fish spawning beds (WAC 220-110-280(4)). Permissible in-water development activities are also subject to seasonal work-closure periods during local forage fish spawning seasons (WAC 220-110- 271(1)). WDFW hydraulic permits granted for in-water development actions may stipulate certain measures to mitigate unavoidable forage fish habitat losses and address interruptions to beach sediment sources and movements. Dredging is specifically prohibited in herring spawning beds under WAC 220-110-320(8).

Research is continuing on designs to promote light penetration beneath overwater structures (Diefenderfer et al., 2004). Design considerations include raising and narrowing the structure, using grating or translucent building materials instead of solid decking, installing reflective surfaces to angle light beneath the structures, orienting structures in a north-south direction, relocating structures to avoid marine vegetation beds, and using the minimum number of piles necessary (Shaffer, 2002).

Natural Ponds

Natural ponds under 20 acres and their submerged aquatic beds provide local habitat to fish, reptiles, amphibians, small mammals, and waterfowl. Although designated as FWHCAs, natural ponds are listed as part of the definition of wetlands within Section 13.11.900.W. Therefore, these areas are already protected under the wetland protection standards of the TMC.

Game Fish

Near the turn of the 19th century, native coldwater game fish found in lowland streams and lakes were unable to support the influx of anglers relocating to the Pacific Northwest and their populations decreased. Due to recreational pressures and a preference by these anglers for fish common to their birthplace, warmwater game species were introduced from around the country. Today, warmwater game fish are important economic and recreational fish. Warmwater species such as bass, bluegill, lake trout and catfish are important sport fish as they boost local economies by means of additional tourism and angler expenditures. These warmwater fish provide fishing alternatives to coldwater game fish such as trout, char, whitefish, and salmon (WDFW, 2005).

No information on warmwater game fish planted in lakes, streams and rivers is available for the City of Tacoma. Coldwater game fish are addressed above under Priority species.

Marine Riparian Areas

General Information

Marine riparian areas are the upland and wetland habitats adjacent to marine nearshore waters, which provide functions and processes that support and protect nearshore habitats. There is growing interest in the importance of marine riparian areas in the Pacific Northwest (Levings and Jamieson, 2001). However, few research studies have been done to determine the function of marine riparian areas, particularly in an urban setting. Rather, most of the science on riparian management areas and buffers comes from research of freshwater streams.

The scientific literature does not recommend a single vegetated riparian width that is necessary to protect all functions. Minimum riparian buffers recommended for Pacific Northwest streams by May (2003) range from 98 feet to over 300 feet for specific functions. For example, to protect freshwater streams from sediment inputs, May recommends that 98 feet is the minimum buffer required for 80 percent sediment removal. On the other hand, a minimum buffer of 328 feet is recommended by May for long-term support of wildlife habitat and microclimate along streams in the Pacific Northwest. Riparian research such as this is typically conducted in a forestry resource setting. The available scientific information does not specifically address urban settings where riparian buffer functions are already compromised by existing residential and industrial development.

The Tri-County Model 4(d) Rule Response also addressed the issue of marine riparian buffers necessary to protect federally-listed salmonid species. The Tri-County response considers marine waters as Type S waters under WAC 222-16-030. The Tri-County model suggests that Type S waters located in urban areas receive a minimum buffer width of 115 feet. An additional outer buffer width of 85 feet is suggested, to offer a total of 200 feet of protection as a "management zone." The minimum buffer width is less sufficient at providing adequate large woody debris recruitment, sediment filtering, and microclimate protection; however a majority of buffer areas in Tacoma are already developed and little natural vegetation remains. Retention of 65 percent of the total vegetation (if the area is entirely vegetated) and no new impervious surfaces is recommended to maintain protective functions within the management zone.

In the marine environment, studies have strongly suggested that the presence of shading terrestrial vegetation in the marine riparian corridor has a positive effect on the survival of surf smelt spawn incubating in sand-gravel beaches in the upper intertidal zone during the summer months within the Puget Sound Basin (Rice, 2006; Penttila, 2001). Such overhanging vegetation appears to serve the same function on marine beaches as it does along freshwater streams. Vegetation serves to moderate water temperature and humidity extremes in microhabitats occupied by early life history stages of spawning fishes otherwise adapted to cold climates (Brennan and Culverwell, 2004; Rice, 2006).

A study conducted by Brennan and Culverwell (2004) evaluates the functions and values of marine ecosystems, including nearshore environments. Ecological functions of marine environments include: soil and slope stability, sediment control, wildlife habitat, microclimate, water quality, nutrient input, fish prey production, habitat structure, and shade. Social values of marine environments include: human health and safety in addition to aesthetic appeal. Vegetation loss surrounding marine environments is one of the most significant factors negatively influencing marine ecosystems. Brennan and Culverwell recommend limitations on non-water dependent impervious surface expansion. They further recommend that marine riparian areas be established to protect aquatic functions, ecosystem processes, and human infrastructure in the shoreline.

The value of conserving marine riparian vegetation is also described in *Protecting Nearshore Habitat and Functions in Puget Sound – An Interim Guide* (EnviroVision et al., October 2007, Draft). Marine riparian vegetation is reported to provide a transitional area connecting marine aquatic and terrestrial habitats. This transitional habitat is important to the overall ecosystem of the Puget Sound due to the functions it provides, when naturally vegetated. The marine riparian area provides large woody debris and organic matter, creates habitats for

insects and marine invertebrates, and supports the marine food web. Large trees along the shoreline provide shade to the upper intertidal zone which protects forage fish spawning habitat. Marine riparian vegetation also protects water quality and reduces surface erosion by slowing urban runoff. Riparian vegetation helps to retain sediments and thereby reduce and remove pollutants in runoff.

Threats/Impacts

Clearing of vegetation and trees to facilitate development are the most common activities in the shoreline threatening marine riparian habitat. Other alterations affecting the connection of marine riparian areas to the nearshore include construction of bulkheads, shoreline armoring, and similar development. Clearing of vegetation can destabilize coastal bluffs or other steep slopes in the marine riparian area. Landslides or erosion may result. Typically, development and vegetation clearing alter shoreline function and habitat diversity is lost.

Location

Marine riparian areas in the City of Tacoma reflect the urban environment of the city. In many locations, the Burlington Northern railroad tracks and existing roads and residential development in the area have reduced the extent of riparian habitat and separated it from the nearshore environment. However, marine riparian vegetation is present in certain locations within Tacoma. In the vicinity of Point Defiance Park, natural riparian forested habitat is found along steep coastal bluffs in the shoreline. Along Ruston Way, scattered trees, shrubs, and grassy park land dominate the riparian zone. In this area, the railroad and Ruston Way separate marine riparian habitat from the nearshore environment, and armoring further reduces riparian habitat functions. Near the Port of Tacoma Waterways, shoreline armoring and existing industrial water-dependent uses have resulted in a lack of native riparian vegetation. However, several restoration sites in the area contain substantial riparian habitat. Along Marine View Drive, mixed riparian vegetation exists on steep bluffs but residential development and roads separate and limit the extent of vegetation (ESA Adolfson, 2007).

Recommended Protections

The WDFW has developed general and specific riparian management recommendations designed to maintain or enhance the structural and functional integrity of riparian habitat and associated aquatic systems. General recommendations serve as a basis for planning and benchmarks for evaluating site conditions. These recommendations follow standard riparian habitat area (RHA) widths. The recommended width for Type 1 and 2 streams; or Shorelines of the State and Shorelines of Statewide Significance is 250 feet (Knutson and Naef, 1997).

Specific riparian management recommendations are discussed in WDFW's *Management Recommendations for Washington's Priority Habitats: Riparian* (Knutson and Naef, 1997) and are grouped by land use management or particular development activity. Recommendations are based on an extensive literature review and are most relevant for freshwater riparian habitats. To protect riparian habitat at the watershed and landscape level, WDFW suggests retaining natural areas in developed landscapes (Beissinger and Osborne, 1982; Dickman, 1987), reducing urban sprawl (Levenson, 1981; Blake, 1986; Dickman, 1987), compensating for lost habitat, and providing corridors that connect riparian and upland habitats. Within urban landscapes and rural areas in proximity to urban lands, management that allows land use with minimal impacts near stream zones (Croonquist and Brooks, 1993), limits impervious surfaces, controls and purifies stormwater run-off (Klein, 1979; Booth and Jackson, 1994), and leads to the adoption of stormwater guidelines (Washington State Department of Ecology's, 1992) should prove effective riparian habitat protection.

Vegetation conservation in marine riparian areas acts to preserve shoreline function and nearshore habitats (EnviroVision et. al, 2007). Protection of nearshore habitat involves regulatory and design considerations for shoreline development. These may include: 1) requiring site surveys of existing vegetation, 2) avoiding and minimizing disturbance during construction, 3) requiring replacement of vegetation damaged or removed during development, 4) requiring retention of large trees, 5) identifying higher priority areas for preservation of marine riparian functions, 6) requiring vegetation conservation plans including replacement and maintenance, and 7) promoting off-site mitigation for projects where riparian vegetation cannot be replaced on site.

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Agenda Item
C-1

OFFICE OF THE HEARING EXAMINER

CITY OF TACOMA

REPORT AND RECOMMENDATION

TO THE

TACOMA CITY COUNCIL

FILE NO.: 124.1328

PETITIONER: G & J Investments, Inc.

SUMMARY OF REQUEST:

Real Property Services has received a petition to vacate a portion of the northerly 12 feet of South 60th Street, lying between South Tacoma Way and the Burlington Northern Santa Fe Rail right-of-way.

RECOMMENDATION OF THE HEARING EXAMINER:

The request is recommended for approval, subject to conditions.

PUBLIC HEARING:

After reviewing the report of the Department of Public Works, Real Property Services Division, examining available information on file with the application, and visiting the subject site and the surrounding area, the Hearing Examiner conducted a public hearing on the application on June 9, 2011.

Agenda Item
C-2

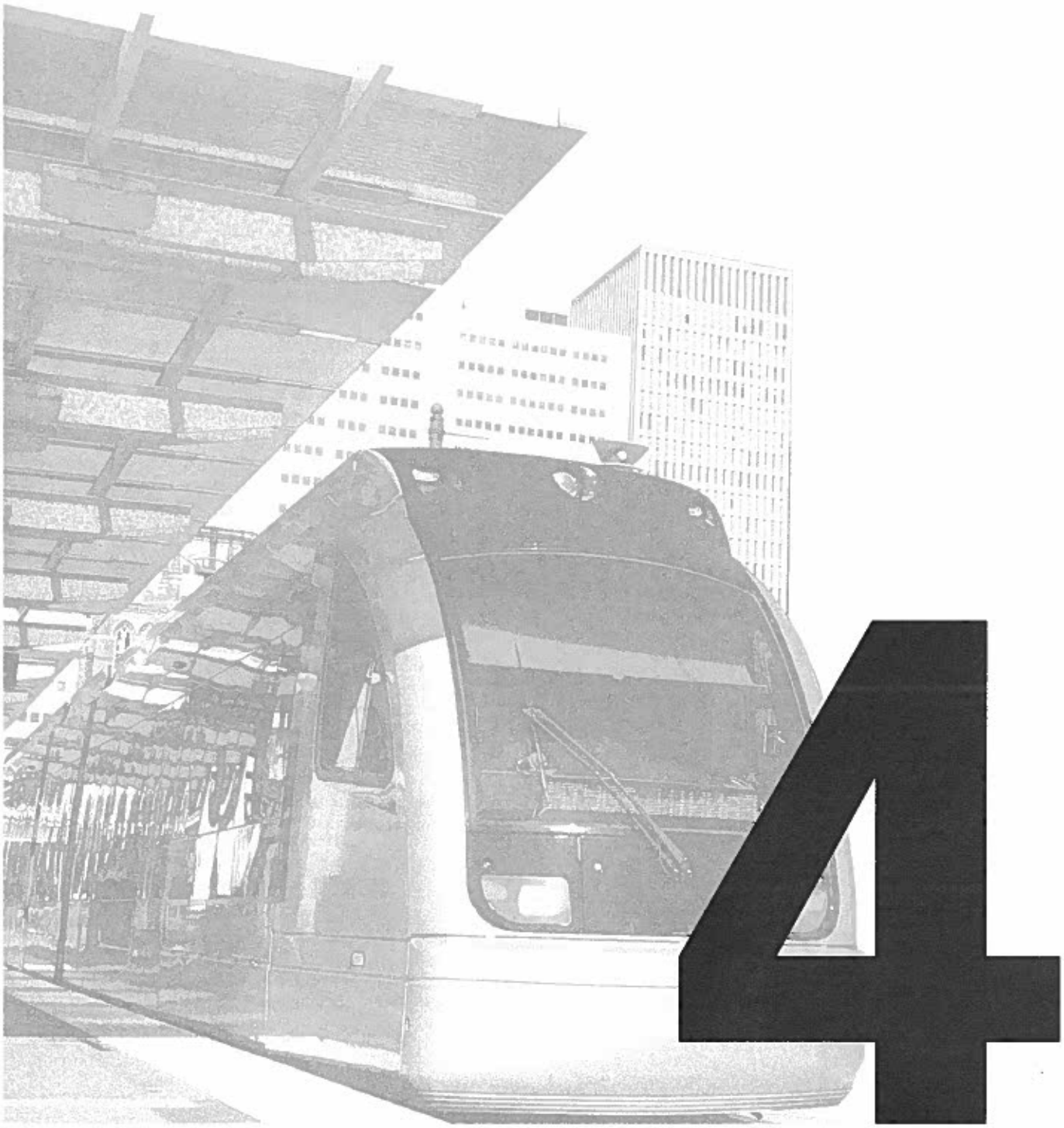
ZONING PRACTICE

APRIL 2011

AMERICAN PLANNING ASSOCIATION

ISSUE NUMBER 4

PRACTICE URBAN ACTIVITY CENTERS

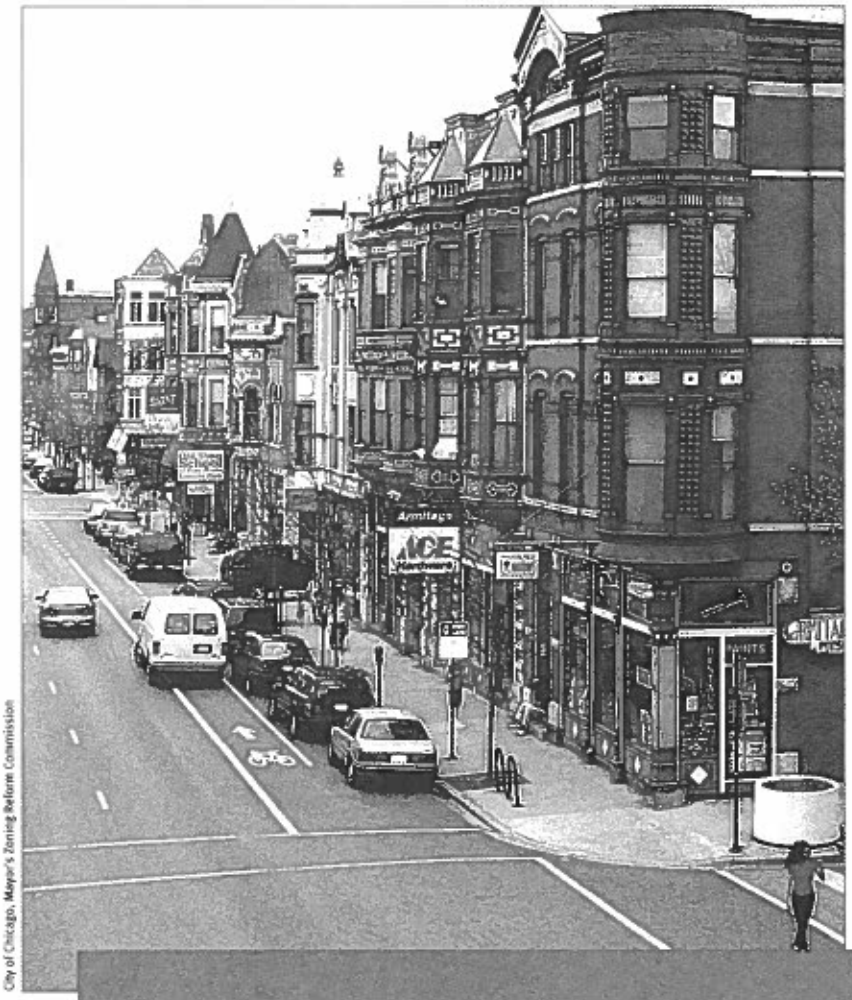


4

Rezoning Urban Retail Strips to Create Neighborhood Centers

By Tom Smith

Planners have argued for an overhaul of urban neighborhood retail for decades.



City of Chicago, Mayor's Zoning Reform Commission

In Chicago's high-income neighborhoods retail strips are economically healthy. These healthy strips, however, have created a false hope in middle- and low-income neighborhoods that all neighborhood strips can be restored. A more realistic strategy calls for consolidation of retail into activity centers and the conversion of old retail corridors to housing.

The old pattern of linear commercial strips strung along miles and miles of major and minor arterials is simply not working. Still, most cities and inner-ring suburbs cling to this linear pattern of retail zoning in hopes that the small businesses that previously populated these strips will somehow be reinvented.

The bleak national economy, however, has further emphasized the need to consolidate since many low- and middle-income neighborhoods are only served by marginal businesses that are dispersed throughout neighborhood's business streets. Problems of vacancy, abandonment, and disinvestment plague these corridors. The worsening state of commercial real estate and the continuing problem of low rents and underused properties support arguments for a major rezoning of these strips. In light of these realities, I believe many cities and inner-ring suburbs need to adopt plans and make zoning changes that encourage the use of strips for housing, churches, schools, and other institutions, and for parks and open spaces. Instead of focusing on long, linear retail strips, planners should turn their attention to drafting plans and zoning codes for neighborhood centers.

This article makes a case for planning new neighborhood retail and activity centers anchored by housing, institutions, and places of employment rather than the traditional anchors of department stores or supermarkets.

FAILING TO SAVE THE STRIP

Ignoring market evidence, cities continue to use tools like tax increment financing (TIF) in a misguided effort to save the strip. Chicago has created approximately 130 TIF districts with the intent of spurring redevelopment, and some of these districts are miles long. As

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Go online during the month of April to participate in our "Ask the Author" forum, an interactive feature of Zoning Practice. *Tom Smith will be available to answer questions about this article. Go to the APA website at www.planning.org and follow the links to the Ask the Author section. From there, just submit your questions about the article using the e-mail link. The author will reply, and* Zoning Practice *will post the answers cumulatively on the website for the benefit of all subscribers. This feature will be available for selected issues of* Zoning Practice *at announced times. After each online discussion is closed, the answers will be saved in an online archive available through the APA* Zoning Practice *web pages.*

About the Author
Tom Smith is a senior community planner for the federal government. For 15 years, he worked for the City of Chicago's planning department and Chicago's zoning department, trying to encourage the redevelopment of the city's commercial strips. He has worked as a consultant to both urban and suburban communities. He teaches land-use planning at the University of Illinois at Chicago.

tax revenues increase within a TIF district, the designation allows the city to collect any new "tax increment" as a source of funds for stimulating new development. However, after 25 years of this effort, the Chicago TIF districts are largely considered a failure and, in some cases, a public finance scandal.

In recent years *Chicago Reader* reporter Ben Joravsky has received considerable local attention for his coverage of Chicago's TIF program. His stories have highlighted the program's lack of transparency, its failure to achieve results outside of the city's booming downtown, and its pattern of public expenditures that seem to benefit city insiders and mayoral supporters. In 2002 a study by Chicago's Neighborhood Capital Budget Group (a now-defunct municipal budget watchdog group) criticized the city's TIF districts for having boundaries that were too large, for targeting areas that were not blighted, and for providing incentives in neighborhoods that didn't need them.

National commentators have also criticized the misuse of TIF districts, especially in those states where TIFs have been used extensively. Jeffrey Spivak, writing in the *Tulane Law Review* (Volume 83:1), states that TIF funded projects have aroused taxpayer protests because "some projects accomplish little of public benefit and hog increased property tax revenues that should have been shared with other local government entities."

In response to some of these criticisms, both California and Wisconsin have placed additional restrictions on the use of TIF districts to ensure that TIF funds are used for projects that would not have occurred without public subsidy.

What is missing in Chicago's (and many other cities') economic development efforts for these strips is a long-term plan coordinated with zoning changes. To date, city and suburban economic development programs for strip commercial often look like a version of *Let's Make a Deal*. The result is city neighborhoods are underserved by retail and plagued by "food deserts."

> What is missing in many cities' economic development efforts for retail strips is a long-term plan coordinated with zoning changes.

GLOOMIER FORECAST FOR THE STRIP

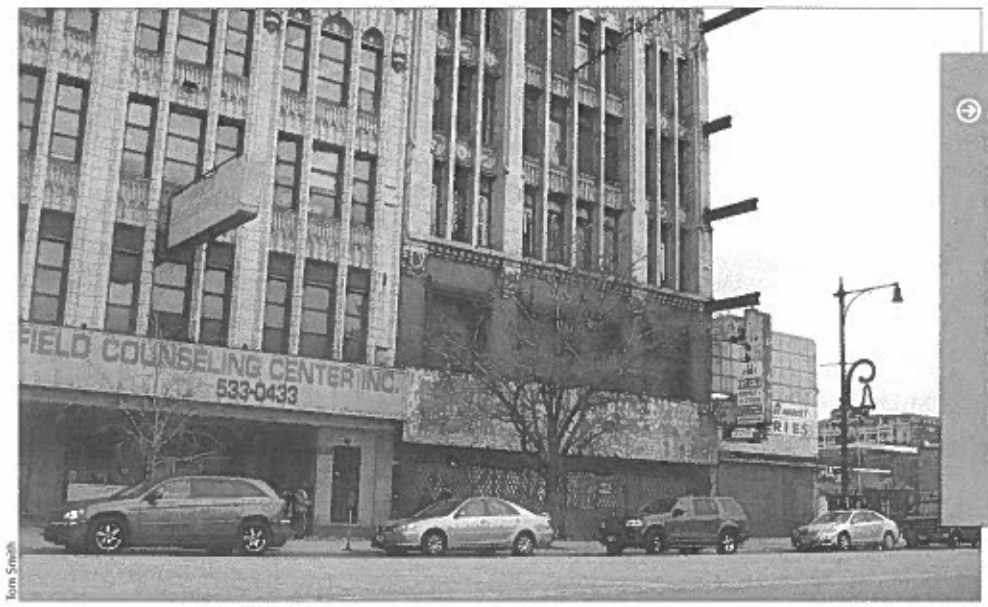
It is hard for cities and suburbs to give up on neighborhood retail strips. Neighborhood retail strips are part of the local history. These strips are the locations where small businesses flourished and small entrepreneurs achieved the American dream. Yet the factors that made these strips successful in the past—the clustering of small businesses, urban densities, and less reliance on automobiles—no longer exist.

For decades, the discount franchise retailers have declared war on the small neighborhood shops that occupied many urban and suburban strips. The very goal of the retail "category killers" is to put others that sell products in their category out of business. Few small-scale neighborhood stores have survived the onslaught of merchandisers like Home Depot and Menards for home improvement, Barnes and Noble for books, Best Buy for electronics, the Sports Authority for sporting goods, Burlington Coat Factory, TJ Maxx, and Marshalls for clothing, and Bed Bath & Beyond for linens and housewares. Category killers offer a wider selection, better prices, and ample parking.

The problem only continues to get worse. The discount warehouses—Wal-Mart, Sam's Club, Costco, BJs Wholesale, Kohl's, and Target—have recently shown an interest in more urban locations. These discounters, however, want to keep their suburban format whenever possible. Where these big box stores have been constructed in urban areas, they are typically built in old industrial districts, further drawing business away from the neighborhood strips.

Other trends including e-commerce have further eroded the stability of neighborhood shopping strips. Forrester Research predicts that e-commerce sales in the U.S. will keep growing at a 10 percent compound annual growth rate through 2014. It forecasts online retail sales in the U.S. will be nearly $250 billion in 2014, up from $155 billion in 2009. Last year, online retail sales were up 11 percent, compared to 2.5 percent for all retail sales. By 2014 e-commerce sales will represent eight percent of all retail sales in the U.S., up from six percent in 2009.

The market issues are magnified when you examine the scale of neighborhood retail strips. In Chicago alone, there are approximately 700 miles of streets zoned for neighborhood retail. This pattern cannot be sustained. These retail areas need to be consolidated into more successful and higher density locations. It is time to acknowledge that the category killers, big box retailers, and franchises have won the battle and that much of the neighborhood retail strip zoning needs to be reconsidered.



Tom Smith

Many small businesses—food stores, apparel shops, newsstands, and home furnishing stores—have abandoned urban retail strips and have been replaced by liquor stores, pawn shops, tattoo parlors, nail and beauty salons, and storefront churches. When cities resist these new uses, it can lead to higher vacancy rates and lower property values.

Ed McMahon, a senior resident fellow at the Urban Land Institute, has concluded that market trends indicate a new paradigm for suburban commercial development. McMahon thinks neighborhood centers that provide a park-once environment will see sharp increases in value as fuel prices rise.

Writing for *Citiwire.net*, McMahon stated his belief in "Future of the Strip: Downhill" (February 4, 2011) that "commercial strips are not going to disappear overnight. But it is increasingly clear that strip retail is the retail for the last century. The future belongs to town centers, main streets, and mixed use developments."

The need to consolidate and reformat retail into attractive, walkable, mixed use centers is an issue in both high-density urban areas and in low-density suburbs. In urban settings we need to consolidate because of overbuilding of strip retail in the 1920s and 1930s, and in the suburbs we need to consolidate because of the overbuilding of strip malls after World War II.

CONSOLIDATION AND REZONING

Cities and inner suburbs desperately need to consolidate the retail areas into more logical and sustainable locations. In Chicago we have struggled to find the political will to do this. Chicago's decision-making process is so political and so fragmented that no mayor or planning/economic development commissioner could tell the local alderman that his neighborhood retail needed to be phased out in favor of storefronts in a better location in another ward. Instead of consolidating strips the city has created hundreds of TIF districts—in hopes that virtually every retail strip could come back.

Given the politics, who has successfully done this? What does consolidation mean in terms of land use? What alternative use is reasonable for neighborhood strips? The next section outlines some of the important steps that some cities have taken to address the issues.

MINNEAPOLIS'S COMMUNITY CORRIDORS

Minneapolis has targeted many of its older commercial corridors for housing because of retail disinvestment, declining tax revenues, and the need for more affordable housing. The city's planning was combined with efforts of nonprofit groups (e.g., Center for Neighborhoods in the Twin Cities and now the Twin Cities Local Initiatives Support Corporation) in a program called the Corridor Housing Initiative.

The city's Department of Community Planning and Economic Development committed significant staff resources to work with neighborhood organizations and builders to promote housing with a significantly higher density than might otherwise be allowed. The goal is to allow for higher housing density while still demonstrating compatibility with the surrounding neighborhood.

Through the city's corridor housing program there is a limited funding source for public acquisition of sites for multifamily housing development on community, commercial, and transit corridors. Funds are used to assemble larger sites for new mixed income rental or condominium housing development. With the recession starting in 2008, the redevelopment of old retail corridors has slowed considerably, but four or five projects, started before the economic downturn, are still ongoing.

The city's economic incentives for converting the older "streetcar" corridors to residential are coordinated with its land-use and zoning classifications. The key classification system is as follows:

Commercial corridors. These streets retain retail zoning. They carry high volumes of automobile traffic, and the city encourages a traditional urban form with buildings built out to the sidewalk. The city's comprehensive plan designates only 11 commercial corridors.

Community corridors. These strips are the streets that are being converted from commercial to residential. These streets provide a connection between neighborhoods, carry moderate levels of traffic, and may have low-intensity commercial at key intersections. The city's comprehensive plan designates 37 community corridors.

Neighborhood commercial nodes. Nodes are focal points for a neighborhood. The commercial uses at nodes are low-intensity, small-scale retail sales and services that cater to the immediate neighborhood. The classification discourages any auto-oriented businesses or high-turnover businesses. The comprehensive plan designates 45 commercial nodes.

CONSOLIDATING THE WEST SIDE OF CLEVELAND

The Cuyahoga County Planning Commission prepared a land-use plan for the old retail streets of the Old Brooklyn and Brooklyn Centre neighborhoods located on the west side of Cleveland because both suffer from high retail vacancy rates.

Most of the retail floor area in Old Brooklyn and Brooklyn Centre is made up of small storefronts and was constructed between 1910 and 1950, when the population base of the city was much larger and before the advent of big box retail. An inventory found a high vacancy rate especially among the old storefronts along the retail strips. In addition, these neighborhood retail districts are now in direct competition with a new regional retail center (Steelyard Commons), as well as a relatively new shopping center (Ridge Park Square). According to the Old Brooklyn/Brooklyn Centre Neighborhood Master Plan, consumer shopping patterns "no longer support the urban, streetcar-oriented shopping corridors."

The plan calls for the consolidation of retail uses in selected nodes. Encouraging existing businesses to relocate to the primary retail nodes (i.e., Old Brooklyn and Brooklyn Centre downtowns, major intersections, and some existing shopping centers), where road and transit networks converge and where traffic and visibility are highest. It calls for relocation assistance for businesses to shift to more prominent and more productive locations.

In a bold statement of purpose, the plan concludes that "to ensure that the Old Brooklyn and Brooklyn Centre retail and commercial areas are strong and viable, efforts are needed to consolidate retail in selected locations, upgrade the physical environment, recruit and retain the right mix of uses and undertake a marketing campaign."

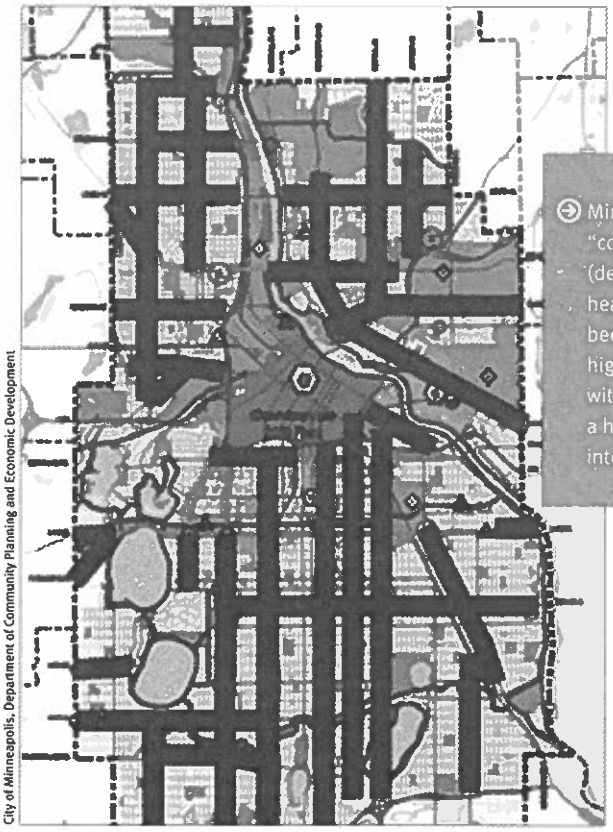
NEW ANCHORS FOR NEIGHBORHOOD CENTERS

The alternative to retail strips is the establishment of neighborhood centers. These should be mixed use centers. They should have good transit access. They should be in locations that allow shoppers, workers, and residents to combine trips for work, services, and groceries.

The most sustainable locations for neighborhood retail will be linked to neighborhood anchors that attract students, workers, or a high density of transit commuters. These nontraditional anchors will generate the traffic needed by neighborhood businesses. Neighborhood retail will be more sustainable if it is linked to neighborhood institutions or employment centers that provide the daily clientele to support local businesses.

In cities and suburbs we have a large number of potential anchors for neighborhood centers. These neighborhood anchors for activity centers might include the following:

- *Universities and colleges.* Cities and suburbs have community colleges, universities, and trade schools that can serve as anchors to neighborhood retail and services.
- *Hospitals and medical centers.* The workers and visitors at hospitals and medical centers create a good base of patrons for nearby restaurants, retail, and services.
- *Transit stations.* Stations with the highest boardings or stations where busses or busses and trains converge are natural focal points.
- *Neighborhood theater and entertainment venues.* Since movie theaters, live theaters, and concert halls mainly attract evening patrons, these uses are best combined with restaurants, nightclubs, and bars that benefit most from evening traffic.



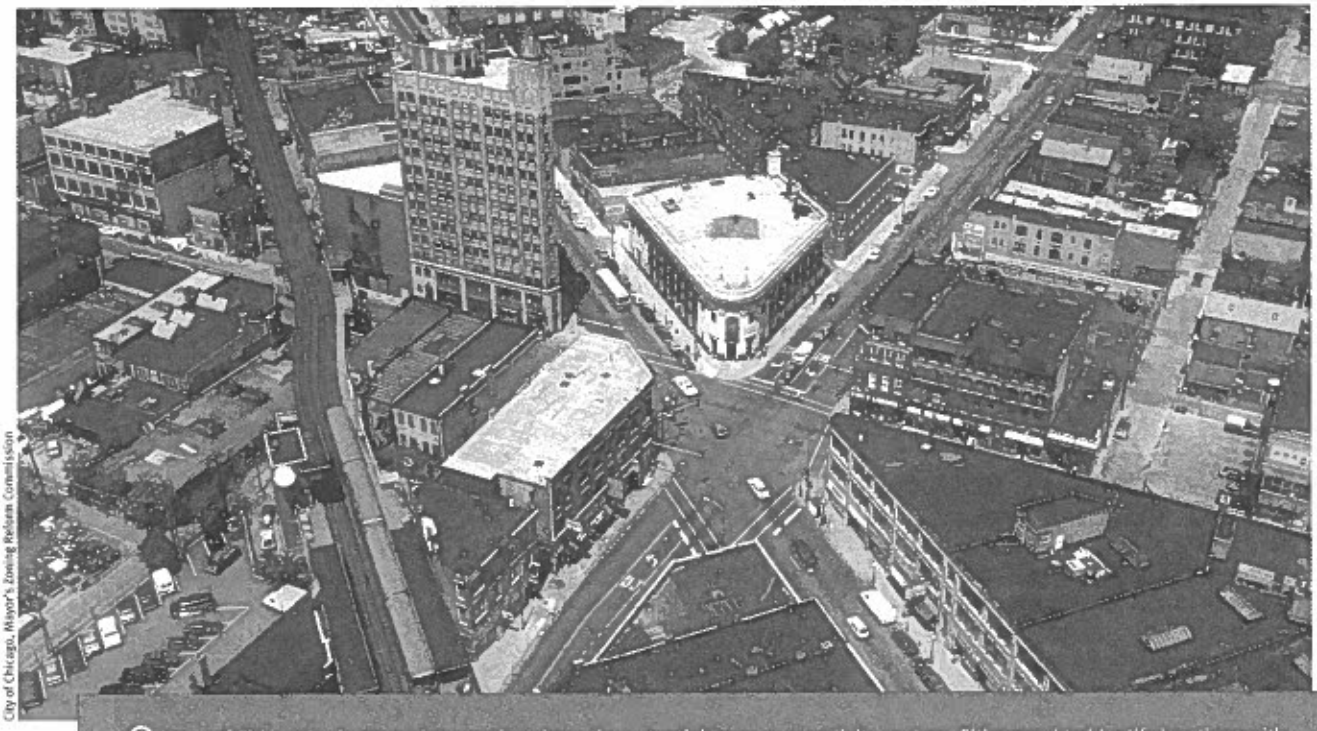
City of Minneapolis, Department of Community Planning and Economic Development

Minneapolis's "community corridors" (designated with heavy lines) have been targeted for high-density housing, with retail limited to a handful of critical intersections.

IDENTIFYING CENTERS

Planners use lot of different terms—neighborhood centers, activity centers, neighborhood nodes—to describe alternatives to the long, linear retail strips. These different terms for centers may mean different things. Activity centers can come in all sizes and shapes. The most successful will be those with a solid anchor that helps to generate significant retail traffic. Some centers may be linear but, in general, these should not be more than two to three. Classifications used by Calgary, Alberta, give an idea of the size and scale of potential activity centers. These classifications define the city's target areas for growth outside of the city center and include the following:

Major Activity Centers (MAC) are locations along the city's busiest transit routes—those bus lines and future rail lines that have the most frequent service and carry the highest traffic. MACs contain one or more transit stations or stops. They have an existing concentration of jobs or population, and they must have sufficient land area to accommodate more jobs and housing. MACs are defined by high density and mixed land use. People who live or work in a MAC should be



City of Chicago, Mayor's Zoning Reform Commission

Many of Chicago's six-corner intersections have the potential to serve as activity centers. Cities need to identify locations with good transit access, higher densities, a strong mix of land uses, and anchors such as schools, hospitals, or large employers.

able to find most of the goods and services needed for daily life within the center.

Community Activity Centers (CAC) are existing shopping center sites or sites around a specific employment area. CACs may be located at transit stations or stops. They are substantially smaller than MACs in land area, and the locations do not offer the same opportunities for adding density or scale.

Neighborhood Activity Centers (NAC) exist primarily within the developed areas of the city in the form of smaller commercial sites—either nodes or small commercial strips. They should be located in the centers of small residential neighborhoods to provide walkable destinations for residents. NACs are typically served by a minimal level of transit service. They will be locations for medium density housing, local retail and services, community facilities, and, when absent, future transit stops.

ZONING FOR CENTERS IN TACOMA

The City of Tacoma, Washington, has successfully incorporated the "center" concept into its zoning regulations. Zoning amendments passed in July 2009 were designed to implement a 2007 comprehensive plan update that described the city's goals for centers. The update defined mixed use centers as Tacoma's primary locations for growth. The centers were identified as locations with some current commercial but also locations where the city could accommodate a significant amount of new development—housing, commercial, and employment growth. The update acknowledged the need for more mixed use, more density, and taller buildings in order to make these centers successful.

The 2009 zoning amendment established the growth and development rules for 17 mixed use centers. The code created new zoning classifications including an Urban Residential Mixed Used District, a Neighborhood Residential Mixed Use District, and a Hospital/Medical Mixed Use District. The city already had mixed use district designations for its downtown area.

A LOST OPPORTUNITY

In the 1990s and early 2000s, Chicago had an exceptionally strong market for new housing and condominiums. In response to this demand, the city proposed and later adopted a new business zoning classification that gave developers the option of building retail or building housing on the city's extensive retail streets. This B2, Neighborhood Mixed Use, district was intended to tap into the significant demand for new housing. It was intended to allow developers to convert existing retail storefronts to residential and to build new residential on numerous vacant lots along the old strips.

Unfortunately, since Chicago had so little consensus on the future of old retail strips, the adoption of the B2 district did not occur until the summer of 2004. By this time, the demand for new housing had slowed. By 2007, the city's housing boom came to a screeching halt and the market driven opportunity to convert the old retail strips to residential had disappeared. The city lost an important opportunity to remove vacant and abandoned properties from the market and to start thinking about transitioning the old strips to residential and other uses.

The city has designated eight centers that serve smaller neighborhood areas, seven centers that serve multiple neighborhoods, and two centers of regional significance (downtown and the existing Tacoma Mall). The principal issue in developing the zoning strategy was defining the center boundaries. Within the centers, the city's maps define where taller buildings can be accommodated along "core pedestrian streets." Each neighborhood center has a core pedestrian street where the incentives for more intensive mixed use development apply and where stricter standards apply to building design and pedestrian amenities. Height bonuses are available to properties within 200 feet of the centerline of each core pedestrian street. Bonuses are granted for features such as ground-floor retail, public art, structured parking, transit stop improvements, stormwater management improvements, green roofs, affordable housing, and contributions to the city's open space fund. The length of the bonus menu gives developers many options to qualify.

The Tacoma amendment prohibits certain uses from mixed use centers including golf courses and new single-family residential uses, and it restricts certain uses from locating along the core pedestrian streets, including building material sales and services, self storage, and vehicle service and repair. The center designations also apply strict standards for drive-through businesses and gas stations. The new zoning rules also require upper-story setbacks for any taller buildings located near the edge of a mixed use center where the building is adjacent to or across the street from a single-family home.

Development in Tacoma's mixed use centers has slowed due to the recession. Despite this, the city's Department of Community and Economic Development is in the process of preparing detailed master plans for some of the mixed use centers in anticipation of significant development once the recession ends.

EXCEPTIONS TO THE CONSOLIDATION RULE

Communities should be making the consolidation of retail strips into compact, activity centers a priority. Retail activity centers anchored by important neighborhood institutions—colleges, universities, hospitals, busy transit stations, popular entertainment venues—are more viable locations for neighborhood retail.

As with every major community development goal, however, communities should also recognize there will be exceptions to this rule. These exceptions include the following:

Ethnic retail strips. In many cities and inner suburbs the traditional and new retail strips of Hispanic, Indian, Italian, Chinese, Greek, and other ethnic groups have successfully expanded as the populations of these groups have expanded. In addition, these strips often offer distinctive products and unique foods that often attract customers and patrons beyond the immediate neighborhoods that they serve.

Strategic arterials. Most cities and larger suburbs have key arterials carrying significant volumes of traffic and that are attractive locations for auto sales and service, fast food restaurants, motels, gas stations, and other auto-oriented commercial uses. Despite the trends discussed above, many of these streets will continue to serve as good locations for high-intensity commercial uses that generate large volumes of automobile traffic.

Historic main streets. Many cities and suburbs have historic retail strips that they will not give up on. Where these strips have a strong historical or architectural character, they may be able to compete with the category killers and big box stores.

DISAPPEARING OR LOST FROM NEIGHBORHOOD STRIPS

- Appliance Stores
- Bakeries
- Bike Shops
- Bookstores
- Bowling Alleys
- Butcher Shops
- Camera Shops
- Card Shops
- Clock/Watch Shops
- Delicatessens
- Department Stores
- Fabric Shops
- Film Processing
- Food Stores (Independent)
- Furniture Stores
- Gift Shops
- Hardware Stores
- Hobby Shops
- Home Improvement
- Ice Cream Stores
- Jewelry Stores
- Kitchen Shops
- Men's Apparel
- Music Stores
- Newspaper/Magazines
- Pet Shops
- Picture Framing
- Shoe Stores
- Small Scale Theaters
- Sporting Goods Stores
- Stationery Shops
- Tobacco Shops
- Toy Stores
- Travel Agents
- Women's Apparel

SURVIVING ON THE NEIGHBORHOOD STRIPS

- Armed Forces Recruiting
- Auto Repair
- Banks
- Coffee Shops
- Day Care Centers
- Day Spas
- Dollar Stores
- Drug Stores
- Dry Cleaners
- Employment Agencies
- Hair Salons/Barbershops
- Health Clubs
- Insurance Agencies
- Laundries
- Mailing/Packaging Stores
- Liquor Stores
- Martial Arts Studios
- Massage Services
- Nail Salons
- Pawn Shops
- Photocopy/Fast Printing
- Real Estate Offices
- Restaurants (Fast Food)
- Saving and Loans
- Schools
- Service Stations
- Storefront Churches
- Tanning Salons
- Telephone Stores
- Used Car Lots
- Weight Loss Centers

Traditional retail sales have disappeared from many neighborhood strips—lost mainly to the competition from big box stores.

CONCLUSION

Communities need to make an honest evaluation of the viability of their retail strips. They need to find the political courage to admit when things are not going well. It is important that communities not be stuck in some *Back to the Future* dream.

The long-term issue is whether cities and older suburbs can compete. The outer-edge suburbs already enjoy the advantage of ample vacant land where they can build "lifestyle centers" and "town centers."

The competition will be fierce. Still many cities and inner-ring suburbs have a much higher population density than the outer suburbs. This density can support more compact, mixed use neighborhood centers. The challenge will be transitioning the old retail strips to housing or other uses. An even bigger challenge will be identifying new locations for compact centers that are anchored by neighborhood institutions such as schools, hospitals, transit stations, or entertainment uses.

The best candidates for urban activity centers are areas with transit stations, higher densities, a strong mix of land uses, and anchors such as schools, hospitals, or large employers. (c) iStockphoto.com/ John Zelimer; design concept by Lisa Barton.

VOL. 28, NO. 4

Zoning Practice is a monthly publication of the American Planning Association. Subscriptions are available for $90 (U.S.) and $115 (foreign). W. Paul Farmer, FAICP, Chief Executive Officer; William R. Klein, AICP, Director of Research

Zoning Practice (ISSN 1548–0135) is produced at APA. Jim Schwab, AICP, and David Morley, AICP, Editors; Julie Von Bergen, Assistant Editor; Lisa Barton, Design and Production.