



CITY OF
BAINBRIDGE ISLAND

**SPECIAL CITY COUNCIL MEETING
THURSDAY, JANUARY 16, 2020**

BAINBRIDGE ISLAND CITY HALL
280 MADISON AVENUE N.
BAINBRIDGE ISLAND, WASHINGTON

AGENDA

1. **CALL TO ORDER/ROLL CALL/PLEDGE OF ALLEGIANCE - 6:00 PM**
Councilmember Tirman will be absent.
2. **EXECUTIVE SESSION**
 - 2.A **(6:05 PM) Pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel matters relating to litigation or potential litigation to which the city, the governing body, or a member acting in an official capacity is, or is likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency, 10 Minutes**
3. **APPROVAL OF AGENDA/CONFLICT OF INTEREST DISCLOSURE - 6:15 PM**
4. **PUBLIC COMMENT - 6:20 PM**
5. **MAYOR'S REPORT - 6:30 PM**
6. **CITY MANAGER'S REPORT - 6:35 PM**
7. **FUTURE COUNCIL AGENDAS**
 - 7.A **(6:40 PM) Review of Future Council Agendas - Mayor Schneider, 15 Minutes**
City Council Study Session January 21, 2020
City Council Regular Business Meeting January 28, 2020
City Council Study Session February 4, 2020
2020 List of Pending Council Meeting Topics
2020 List of Proposed Future Council Topics
8. **PRESENTATION(S)**

- 8.A **(6:55 PM) Proclamation Recognizing Dr. Martin Luther King Day on January 20, 2020 - Mayor Schneider**, 5 Minutes
Martin Luther King Proclamation 2020

9. **UNFINISHED BUSINESS**

- 9.A **(7:00 PM) Wyatt Way Reconstruction Project Professional Services Agreement Amendment No. 4 - Public Works**, 10 Minutes
Amendment No. 4. to Professional Services Agreement
Exhibit A Scope of Work
- 9.B **(7:10 PM) Wyatt Way Reconstruction Project Budget Increases - Public Works**, 5 Minutes
Wyatt Way Presentation 010920.pptx
Wyatt Way Reconstruction Budget Report
- 9.C **(7:15 PM) Affirm 2020 City Council Top Priorities**, 5 Minutes
DRAFT - 2020 City Council Priorities.docx
- 9.D **(7:20 PM) Affirm 2020 Citywide Workplan Priorities - Executive**, 5 Minutes
Q1-2020 Workplan Focus.pdf
2020 Citywide Workplan Priorities
- 9.E **(7:25 PM) Affirm 2020 Transportation Benefit Fund Spending Plan for Road Repairs and Maintenance - Finance**, 10 Minutes
Presentation TBD 11122019 (Revised 011420)
- 9.F **(7:35 PM) City Council Committee and Liaison Assignments - City Council**, 10 Minutes
Draft - 2020 Council Assignments 1-10-20.docx
- 9.G **(7:45 PM) Settlement Agreement with Whitney Equipment Company, Inc., Relating to the Village Pump Station Replacement Project**, 10 Minutes
Settlement Agreement and Release of Claims
Exhibit A to Settlement Agreement and Release of Claims

10. **CONSENT AGENDA**

- 10.A **(7:55 PM) Agenda Bill for Consent Agenda**, 5 Minutes
- 10.B **Accounts Payable and Payroll**
Payroll 12-20-2019.pdf
Payroll 1-6-2020.pdf
Report to Council of Cash Disbursements 12-26-19.pdf
Report to Council of Cash Disbursements 01-15-20.pdf
- 10.C **City Council Study Session Minutes, December 3, 2019**
City Council Study Session Minutes December 3, 2019

- 10.D **Special City Council Meeting Minutes, December 10, 2019**
Special City Council Meeting Minutes December 10, 2019
- 10.E **Sustainable Transportation Professional Services Agreement Award and Budget Amendment - Public Works** 5 Minutes
Professional Services Agreement - Nelson Nygaard
- 10.F **Memorandum of Understanding with Seattle Police Department Regarding Agency Participation in the Internet Crimes Against Children (ICAC) Multi-Jurisdictional Task Force - Police** 10 Minutes
NW Regional Task Force Memorandum of Understanding

11. COMMITTEE REPORTS

- 11.A **(8:00 PM) Committee Reports**, 5 Minutes
Climate Change Advisory Committee Meeting Minutes, November 18, 2019
Ethics Board Meeting Minutes, October 21, 2019
Environmental Technical Advisory Committee Minutes, October 17, 2019
Ethics Board Meeting Minutes, September 16, 2019
Utility Advisory Committee Minutes, December 11, 2019

12. FOR THE GOOD OF THE ORDER - 8:05 PM

13. ADJOURNMENT - 8:10 PM

GUIDING PRINCIPLES

Guiding Principle #1 - Preserve the special character of the Island, which includes downtown Winslow's small town atmosphere and function, historic buildings, extensive forested areas, meadows, farms, marine views and access, and scenic and winding roads supporting all forms of transportation.

Guiding Principle #2 - Manage the water resources of the Island to protect, restore and maintain their ecological and hydrological functions and to ensure clean and sufficient groundwater for future generations.

Guiding Principle #3 - Foster diversity with a holistic approach to meeting the needs of the Island and the human needs of its residents consistent with the stewardship of our finite environmental resources.

Guiding Principle #4 - Consider the costs and benefits to Island residents and property owners in making land use decisions.

Guiding Principle #5 - The use of land on the Island should be based on the principle that the Island's environmental resources are finite and must be maintained at a sustainable level.

Guiding Principle #6 - Nurture Bainbridge Island as a sustainable community by meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Guiding Principle #7 - Reduce greenhouse gas emissions and increase the Island's climate resilience.

Guiding Principle #8 - Support the Island's Guiding Principles and Policies through the City's organizational and operating budget decisions.



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CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: (6:05 PM) Pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel matters relating to litigation or potential litigation to which the city, the governing body, or a member acting in an official capacity is, or is likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency,

SUMMARY: Executive session pursuant to RCW 42.30.110(1)(i).

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: Hold Executive Session.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 15 Minutes

AGENDA ITEM: (6:40 PM) Review of Future Council Agendas - Mayor Schneider,

SUMMARY: Council will review future Council agendas.

AGENDA CATEGORY: Discussion

PROPOSED BY: City Council

RECOMMENDED MOTION: Discussion.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[City Council Study Session January 21, 2020](#)

[City Council Regular Business Meeting January 28, 2020](#)

[City Council Study Session February 4, 2020](#)

[2020 List of Pending Council Meeting Topics](#)

[2020 List of Proposed Future Council Topics](#)

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

**CITY COUNCIL STUDY SESSION
TUESDAY, JANUARY 21, 2020**

BAINBRIDGE ISLAND CITY HALL
280 MADISON AVENUE N.
BAINBRIDGE ISLAND, WASHINGTON

AGENDA

1. **CALL TO ORDER / ROLL CALL - 6:00 PM**
Councilmember Tirman will be absent.
2. **EXECUTIVE SESSION**
3. **APPROVAL OF AGENDA/ CONFLICT OF INTEREST DISCLOSURE**
4. **MAYOR'S REPORT**
5. **FUTURE COUNCIL AGENDAS**
 - 5.A **Future Council Agendas, 10 Minutes**
6. **PRESENTATIONS**
7. **UNFINISHED BUSINESS**
 - 7.A **(X PM) Police and Court Project Update and Sustainability Discussion - Public Works, 30 Minutes**
 - 7.B **(XX PM) Formation of Council Ad Hoc Committee for Public Farmland - Executive, 5 Minutes**
Public Farmland Ad Hoc Committee and Scope of Work 01072020
8. **NEW BUSINESS**
 - 8.A **Options for Potential "City Academy" Annual and Quarterly Community Engagement Programs, 30 Minutes**
 - 8.B **Sustainable Transportation Plan: Laying the Groundwork - Public Works, 2 Hours**
9. **CITY COUNCIL DISCUSSION**

10. FOR THE GOOD OF THE ORDER

11. ADJOURNMENT

GUIDING PRINCIPLES

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**CITY OF
BAINBRIDGE ISLAND**

**CITY COUNCIL REGULAR BUSINESS MEETING
TUESDAY, JANUARY 28, 2020**

**BAINBRIDGE ISLAND CITY HALL
280 MADISON AVENUE N.
BAINBRIDGE ISLAND, WASHINGTON**

AGENDA

- 1. CALL TO ORDER/ROLL CALL/PLEDGE OF ALLEGIANCE - 6:00 PM**
- 2. EXECUTIVE SESSION**
 - 2.A (6:05 PM) Pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel matters relating to litigation or potential litigation to which the city, the governing body, or a member acting in an official capacity is, or is likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency, 30 Minutes**
- 3. APPROVAL OF AGENDA / CONFLICT OF INTEREST DISCLOSURE**
- 4. PUBLIC COMMENT**
- 5. MAYOR'S REPORT**
- 6. CITY MANAGER'S REPORT**
- 7. FUTURE COUNCIL AGENDAS**
- 8. PRESENTATION(S)**
 - 8.A Proclamation declaring February 9, 2020 as "The Arc of the Peninsulas Awareness Day," 5 Minutes**
- 9. UNFINISHED BUSINESS**
 - 9.A Visconsi Trail Project Update and Budget Amendment - Public Works, 10 Minutes**
 - 9.B (x PM) Ordinance No. 2020-01, Updating the City's General Code Enforcement Process Contained in Chapter 1.26 BIMC (Placeholder) 20 Minutes**

- 9.C (XX PM) Youth Mental Health Workshop Proposal - Council Ad Hoc Committee, Executive, 20 Minutes**
BI Youth Mental Health Summit Proposal - for CC 01282020

10. NEW BUSINESS

- 10.A Biennial Budget Process 20 Minutes**

- 10.B Review 2019 Results for Citywide Workplan Priorities and Comprehensive Plan Implementation. 15 Minutes**

- 10.C Resolution No. 2020-01 Relating to a Fee Schedule Update - Finance, 10 Minutes**
Resolution No. 2020-01 Updating Fee Schedule.docx

- 10.D Amendment to Master Lease Agreement between the City of Bainbridge Island and Friends of the Farms, Executive - 10 Minutes**
Amendment No 2 to Master Lease Agreement

- 10.E COBI and BIMPRD Trail Workgroup Inventory Discussion - Public Works, 45 Minutes**

11. CONSENT AGENDA

- 11.A Agenda Bill for Consent Agenda, 5 Minutes**

- 11.B Accounts Payable and Payroll**

- 11.C City Council Study Session Minutes, January 7, 2020**

- 11.D City Council Regular Business Meeting Minutes, January 14, 2020**

12. COMMITTEE REPORTS

13. FOR THE GOOD OF THE ORDER

14. ADJOURNMENT

GUIDING PRINCIPLES

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**CITY OF
BAINBRIDGE ISLAND**

**CITY COUNCIL STUDY SESSION
TUESDAY, FEBRUARY 04, 2020**

**BAINBRIDGE ISLAND CITY HALL
280 MADISON AVENUE N.
BAINBRIDGE ISLAND, WASHINGTON**

AGENDA

- 1. CALL TO ORDER / ROLL CALL - 6:00 PM**
- 2. EXECUTIVE SESSION**
- 3. APPROVAL OF AGENDA/ CONFLICT OF INTEREST DISCLOSURE**
- 4. MAYOR'S REPORT**
- 5. FUTURE COUNCIL AGENDAS**
- 6. PRESENTATIONS**
- 7. UNFINISHED BUSINESS**
 - 7.A Update on the Development Moratorium - Planning, 10 Minutes**
 - 7.B Green Building Update - Planning, 10 Minutes**
 - 7.C Sustainable Transportation Plan Update - Public Works, 15 Minutes**
 - 7.D (x PM) Discussion of Possible Inclusionary Zoning / Multifamily Tax Exemption Programs - Planning, 60 Minutes**
 - ECONorthwest Council Briefing Memo - Inclusionary Zoning and MFTE
 - WMP Study Area Zoning Map
 - PSRC Inclusionary Zoning Summary.pdf
 - PSRC MFTE Summary.pdf
 - February 2019 Transfer of Development Rights and Inclusionary Zoning Assessment (ECONorthwest & Forterra)
 - February 2019 Presentation - TDR / Incentive Zoning Analysis (ECONorthwest & Forterra)

7.E (x PM) Next Steps for Suzuki Property Affordable Housing Project - Executive, 60 Minutes
Suzuki Revised Proposal 111319.pdf

7.F State Route 305 / Day Road Roundabout Project Update - Public Works 10 Minutes

8. NEW BUSINESS

9. CITY COUNCIL DISCUSSION

10. FOR THE GOOD OF THE ORDER

11. ADJOURNMENT

GUIDING PRINCIPLES

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CITY OF
BAINBRIDGE ISLAND

Memorandum

Date: 1/10/2020
To: City Council
From: Morgan Smith, Deputy City Manager
Subject: Pending City Council Topics

The table below provides a list of City Council topics that are currently ready for Council consideration but have not yet been scheduled for a Council meeting. Some notes are provided to indicate to what degree the topic is time-sensitive, etc.

TOPIC	NOTES
BIMC Title 2 and 18 – process changes	Workplan item from 2018 development moratorium. Planning Commission review is complete and ordinance is ready for City Council final review. Depending on Council level of interest, could either go to study session first or go straight to business meeting.
BIMPRD trail workgroup presentation	Presentation on 2019 interagency work to complete comprehensive, islandwide inventory of existing and future network of trail, shoulder and easement connections. Relates to Sustainable Transportation Plan and potential proposal to move forward with two near-term trail projects through City/BIMPRD collaboration.
BIMPRD proposal to manage City Dock	Suggest schedule in Q1 in order to reach decision ahead of planned RFP process. In the absence of any changes, City will issue RFP in Q3 to cover City Dock services after current agreement expires (12/31/20)
Ethics Program follow-up question	Discussion to meet Q4-2019 commitment to address question on what should happen in the event procedures are not followed.



CITY OF
BAINBRIDGE ISLAND

Memorandum

Date: 1/10/2020
To: City Council
From: Morgan Smith, Deputy City Manager
Subject: Proposed Future City Council Topics

The table below provides a list of potential future City Council topics that have been identified by one or more councilmembers.

TOPIC
\$15 minimum wage
Rights of Nature ordinance
Packaging ordinance
Islandwide 25 mph speed limit
Tenant policies for rental properties
Requirement for on-site manager for short-term rental units
Street Tree program



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (6:55 PM) Proclamation Recognizing Dr. Martin Luther King Day on January 20, 2020 - Mayor Schneider,

SUMMARY:

The attached proclamation recognizes Dr. Martin Luther King Day on January 20, 2020. This proclamation is one of the annual proclamations that the Mayor is authorized to sign without further Council action.

AGENDA CATEGORY: Proclamation

PROPOSED BY: Executive

RECOMMENDED MOTION:

Presentation only.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Martin Luther King Proclamation 2020](#)

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

PROCLAMATION

WHEREAS, the Rev. Dr. Martin Luther King, Jr., who was born on January 15, 1929, dedicated his life to promoting peace, freedom, equality, and justice for all through non-violent means; and

WHEREAS, federal and state legislation has recognized Dr. King's legacy as one of America's outstanding civil rights leaders by adopting his birthdate as a national event on the third Monday of January; and

WHEREAS, on August 28, 1963, Dr. King, as part of the March on Washington, delivered a historic speech at the Lincoln Memorial which called for an end to racism in the United States; and

WHEREAS, Dr. King and the Civil Rights Movement helped change public policy from segregation to integration, resulting in the repeal of the post-Reconstruction era state laws mandating racial segregation in the South known as the "Jim Crow Laws," thereby leading to the passage of the Civil Rights Act of 1964, the Voting Rights Act of 1965, and other antidiscrimination laws aimed at ending economic, legal, and social segregation in America; and

WHEREAS, Dr. King and the Civil Rights Movement helped change public policy from legal and socially acceptable discrimination and segregation to an open and accessible policy of racial integration leading to equal participation and access to primary and higher education, housing, employment, transportation, federal, state, and local governmental elections, and other aspects of public policy relating to human rights; and

WHEREAS, Dr. King stated in his speech, "I say to you today, my friends, though, even though we face the difficulties of today and tomorrow, I still have a dream. It is a dream that one day this nation will rise up, live out the true meaning of its creed: "We hold these truths to be self-evident, that all men are created equal;" and

WHEREAS, Dr. King continued to state in his speech, "This will be the day when all God's children will be able to sing with new meaning. "My country, 'tis of thee, sweet land of liberty, of thee I sing. Land where my fathers died, land of the pilgrim's pride, from every mountainside, let freedom ring." And if America is to be a great nation, this must become true;" and

WHEREAS, Dr. King believed that service was "the soul's highest purpose," and was the path to happiness, greatness and God; and

WHEREAS, Dr. King once said, "Life's most persistent and urgent question is: 'What are you doing for others?'" Americans across the country will answer that question by coming together to honor Dr. King by helping their neighbors and communities through thousands of service projects spread across all 50 states; and

WHEREAS, Bainbridge Island residents are encouraged to observe the holiday not only by reflecting on Dr. King's legacy but also by actively serving others; and

WHEREAS, national and international events teach us the unfortunate lesson that the age of violence and hatred has not passed, and that now as much as at any time Dr. King's message of non-violence should be celebrated.

NOW, THEREFORE, I, Leslie Schneider, Mayor of the City of Bainbridge Island, on behalf of the City Council do hereby proclaim Monday, January 20, 2020, as

DR. MARTIN LUTHER KING, JR. DAY

in the city of Bainbridge Island, Washington in recognition of his birth, life, and death, and ask all citizens to celebrate this day by continuing to live Dr. King's dream daily, respecting all others regardless of their race, color or creed.

Signed this 14th day of January, 2020

Leslie Schneider, Mayor



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: (7:00 PM) Wyatt Way Reconstruction Project Professional Services Agreement Amendment No. 4 - Public Works,

SUMMARY: City staff is requesting that the Council approve a Professional Services Agreement Amendment No. 4 with MIG/SvR in the amount of \$10,000 for completing the project design with value engineering elements.

AGENDA CATEGORY: Contract

PROPOSED BY: Public Works

RECOMMENDED MOTION: I move to forward Amendment No. 4 of the Wyatt Way Reconstruction Project Professional Services Agreement with MIG/SvR in the amount of \$10,000.00 for approval with the January 28, 2020 Consent Agenda.

STRATEGIC PRIORITY: Reliable Infrastructure and Connected Mobility

FISCAL IMPACT:

Amount:	\$10,000.00
Ongoing Cost:	
One-Time Cost:	\$10,000.00
Included in Current Budget?	Yes

BACKGROUND: The Wyatt Way Reconstruction Phase 1 Project consists of roadway resurfacing, intersection capacity improvements at Wyatt and Madison, water system improvements, and sidewalks and bike lanes on each side of the roadway between Madison Avenue and Lovell Avenue.

The City has a professional services agreement with MIG/SvR for the project design and engineering in the amount of \$348,863.00, and Amendment No. 4 in the amount of \$10,000.00 is needed to complete the value engineering revisions to the design, bringing the total contract amount to \$358,863.00. The staff anticipates that this will be the last amendment required until additional services are requested for construction administration services.

ATTACHMENTS:

[Amendment No 4. to Professional Services Agreement](#)

[Exhibit A Scope of Work](#)

FISCAL DETAILS: As of December 30, 2019, this project had approximately \$2.7M in general fund budget available, of which \$10K is proposed to be expended on this contract amendment.

Fund Name(s): General Fund

Coding: 72321951-641100-00708

**AMENDMENT NO. 4 TO
AGREEMENT FOR PROFESSIONAL SERVICES**

THIS AMENDMENT NO. 4 TO THE AGREEMENT FOR PROFESSIONAL SERVICES (“Amendment”) amends the Agreement for Professional Services (“Agreement”) entered into on June 29, 2016, by the City of Bainbridge Island, a Washington State municipal corporation, (“City”), and Moore Iacofano Goltsman, Inc., d/b/a MIG/SvR, a California corporation (“Consultant”).

WHEREAS, the City and the Consultant entered into the Agreement to design the Wyatt Way Reconstruction Project (Madison Ave. to Lovell Ave. NW); and

WHEREAS, on January 22, 2018, the City and the Consultant executed Amendment No. 1 to the Agreement, retaining the Consultant for potholing services, extending the term of the Agreement to January 10, 2020, and increasing the maximum amount payable under the Agreement by \$38,893.00; and

WHEREAS, on February 1, 2019, the City and the Consultant executed Amendment No. 2 to the Agreement, retaining the Consultant to perform an initial redesign of the roundabout, extend the term of the Agreement to January 10, 2021, and to increase the maximum amount payable under the Agreement by \$9,890.00; and

WHEREAS, on June 4, 2019, the City and the Consultant executed Amendment No. 3 to the Agreement, retaining the Consultant to perform a redesign of the storm system and roundabout, and to increase the maximum amount payable under the Agreement by \$41,120.00; and

WHEREAS, the City now desires to retain the Consultant to perform a redesign of areas of full pavement section replacement that will result in construction cost savings and to increase the maximum amount payable under the Agreement by \$10,000.00.

NOW, THEREFORE, the City and the Consultant agree to amend the Agreement as follows:

1. Section 2.A is hereby amended to read as follows:

A. The City shall pay the Consultant for such services: (check one)

Hourly, plus actual expenses, in accordance with Attachment A, but not more than a total of; ~~Three Hundred Forty Eight Thousand Eight Hundred Sixty Three Dollars (\$348,863.00);~~ Three Hundred Fifty-Eight Thousand Eight Hundred Sixty-Three Dollars (\$358,863.00);

Fixed Sum: a total amount of \$ _____;

Other: \$ _____, for all services performed and incurred under this Agreement, to be billed monthly in equal amounts.

2. Attachment A, Scope of Services, is hereby amended to include additional work as set forth in attached Exhibit A, which is fully incorporated into this Amendment by this reference.
3. Except as modified herein, all other terms and conditions to the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment to the Agreement as of the later of the signature dates included below.

MOORE IACOFANO GOLTSMAN, INC.

CITY OF BAINBRIDGE ISLAND

Date: _____

Date: _____

By: _____

By: _____

Name _____

Morgan Smith, City Manager

Title _____

Tax I.D. # _____

City Bus. Lic. # _____

Exhibit A

Fee Estimate for City of Bainbridge Island Wyatt Way - Redesign for Construction Cost Savings DATE: November 26, 2019						
Scope of Work	Total	Principal	Senior Engineer VI	Engineer IV	CAD Technician	EIT, Landscape Designer II
		\$ 275.00	\$ 150.00	\$ 145.00	\$ 100.00	\$ 95.00
Cost savings redesign						
Modify centerline profile to eliminate full pavement reconstruction between Grow and Madison and replace with curb profile for new curb and sidewalk construction		0.5	6.0		16.0	4.0
Reduce limits of full pavement construction and modify: typical sections, demo and pavement limits, driveway profiles, drainage structures, and wall profile at service station		0.5	4.0	4.0	16.0	4.0
Remove curb and sidewalk improvements on Grow north of Wyatt and update demo and paving limits, storm drainage design, driveway and grading			2.0	4.0	8.0	8.0
	<i>77.0</i>	1.0	12.0	8.0	40.0	16.0
Total Fee - Cost savings redesign	\$ 8,755.00	\$ 275.00	\$ 1,800.00	\$ 1,160.00	\$ 4,000.00	\$ 1,520.00
Deliverables:						
Final PS&E Documents incorporating design changes						



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (7:10 PM) Wyatt Way Reconstruction Project Budget Increases - Public Works,

SUMMARY: Two project budget increases are needed to support the Wyatt Way Reconstruction project: an increase from the general fund in the amount of \$308,251 to cover the cost of construction-related consulting services (engineering, materials testing, etc.) and to include a 10% general fund contingency; and, an increase from the water fund in the amount of \$127,500 to cover increases in the water-related construction scope and to include a 10% water fund contingency.

AGENDA CATEGORY: Contract

PROPOSED BY: Public Works

RECOMMENDED MOTION: I move to forward for approval with the January 28, 2020 Consent Agenda spending authority for the City Manager to increase the project budget for the Wyatt Way Reconstruction Project in the amount of \$308,251 from the general fund and \$127,500 from the water fund, which amounts and related activities will be included in a future budget amendment and an amendment to the Capital Improvement Plan.

STRATEGIC PRIORITY: Reliable Infrastructure and Connected Mobility

FISCAL IMPACT:

Amount:	\$308,251 general fund; \$127,500 water fund
Ongoing Cost:	
One-Time Cost:	\$308,251 general fund; \$127,500 water fund
Included in Current Budget?	No

BACKGROUND: The Wyatt Way Reconstruction Project consists of roadway resurfacing, intersection capacity improvements at Wyatt and Madison, water system improvements, and sidewalks and bike lanes on each side of the roadway between Madison Avenue and Lovell Avenue. City staff is requesting two project budget increases.

The first is an increase to the project's general fund budget. The current project construction estimate for the general fund-related work (streets, sidewalks, drainage, lighting, etc.) is very close to the current remaining budget. Therefore, City staff is seeking a general fund project budget increase for costs associated with construction consultant support (engineering, materials testing, etc.), and a 10% contingency, an amount that totals \$308,251. If the final bids for the construction contract are lower than the City's estimate, and/or if

contingency funds are not needed, then these funds would be reallocated back to the general fund at the close-out of the project.

The second is an increase to the project's water fund budget, which is related to three factors identified by the project management team. First, the current project design has been modified to include approximately 200 linear feet of additional water main replacement for facilities that are beyond their serviceable life. Additionally, City staff has revised and increased the cost estimate for the replacement of a water-related pressure release valve to reflect an amount that is in line with other similar work recently completed by the City. Lastly, staff is requesting that the water fund element of the project budget be increased to capture a 10% contingency. All together, these three factors increase the water fund portion of the project budget by \$127,500. If the final bids for the construction contract are lower than the City's estimate, and/or if contingency funds are not needed, then these funds would be reallocated back to the water fund at the close-out of the project.

If the two project budget increases are approved, the new total project budget will be \$4,008,251 for the general fund and \$277,500 for the water fund, or \$4,285,751 total. Approximately \$2.5 million of the total budget, or almost 60%, will come from a State Transportation Improvement Grant received in 2015. See the attached project budget report for details on the project budget history.

Upon Council approval, a proposed budget amendment and amendment to the Capital Improvement Plan will be included in the 1st quarter budget adjustment reporting for 2020.

ATTACHMENTS:

[Wyatt Way Presentation 010920.pptx](#)

[Wyatt Way Reconstruction Budget Report](#)

FISCAL DETAILS: FISCAL DETAILS: There is currently \$3,700,000 in the General Fund and \$150,000 in the Water Fund for a total of \$3,850,000 for this project. The proposed project budget increases would increase the General Fund Budget by \$308,251 for a total of \$4,008,251, and increase the Water Fund by \$127,500 for a total of \$277,500. The revised total project budget would be \$4,285,751.

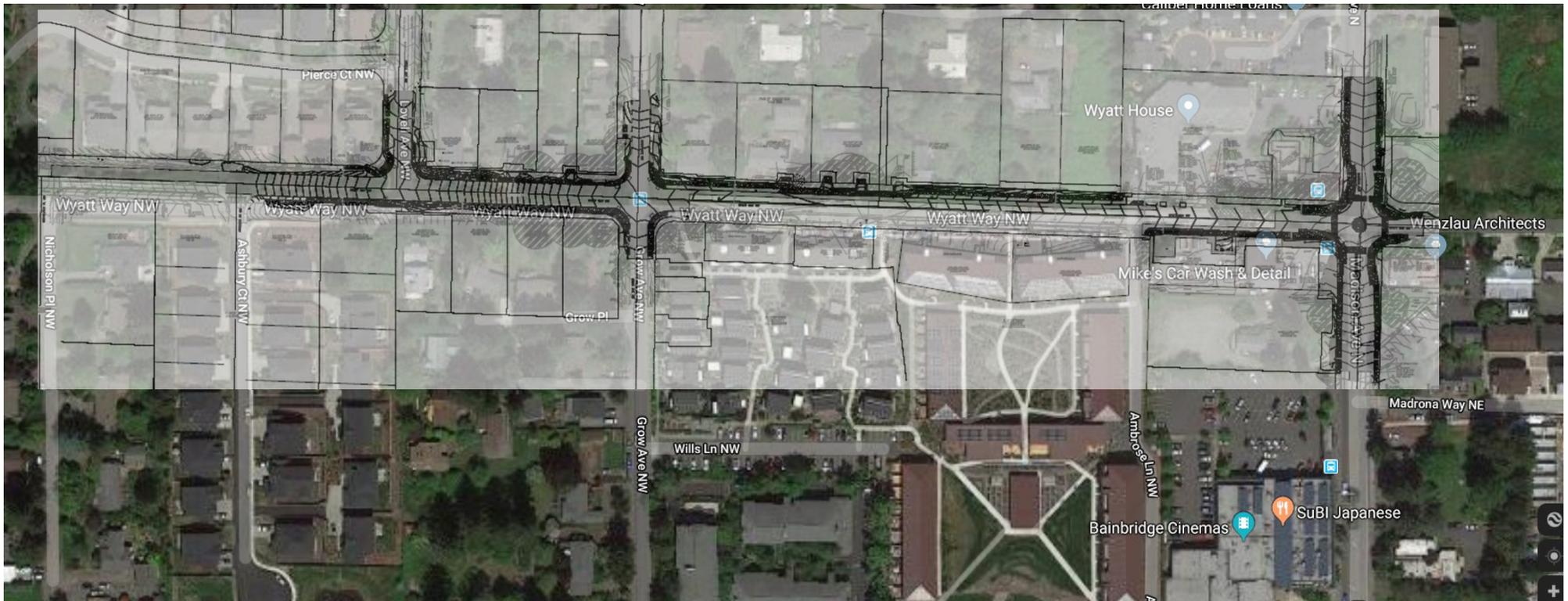
Fund Name(s): General Fund

Coding:

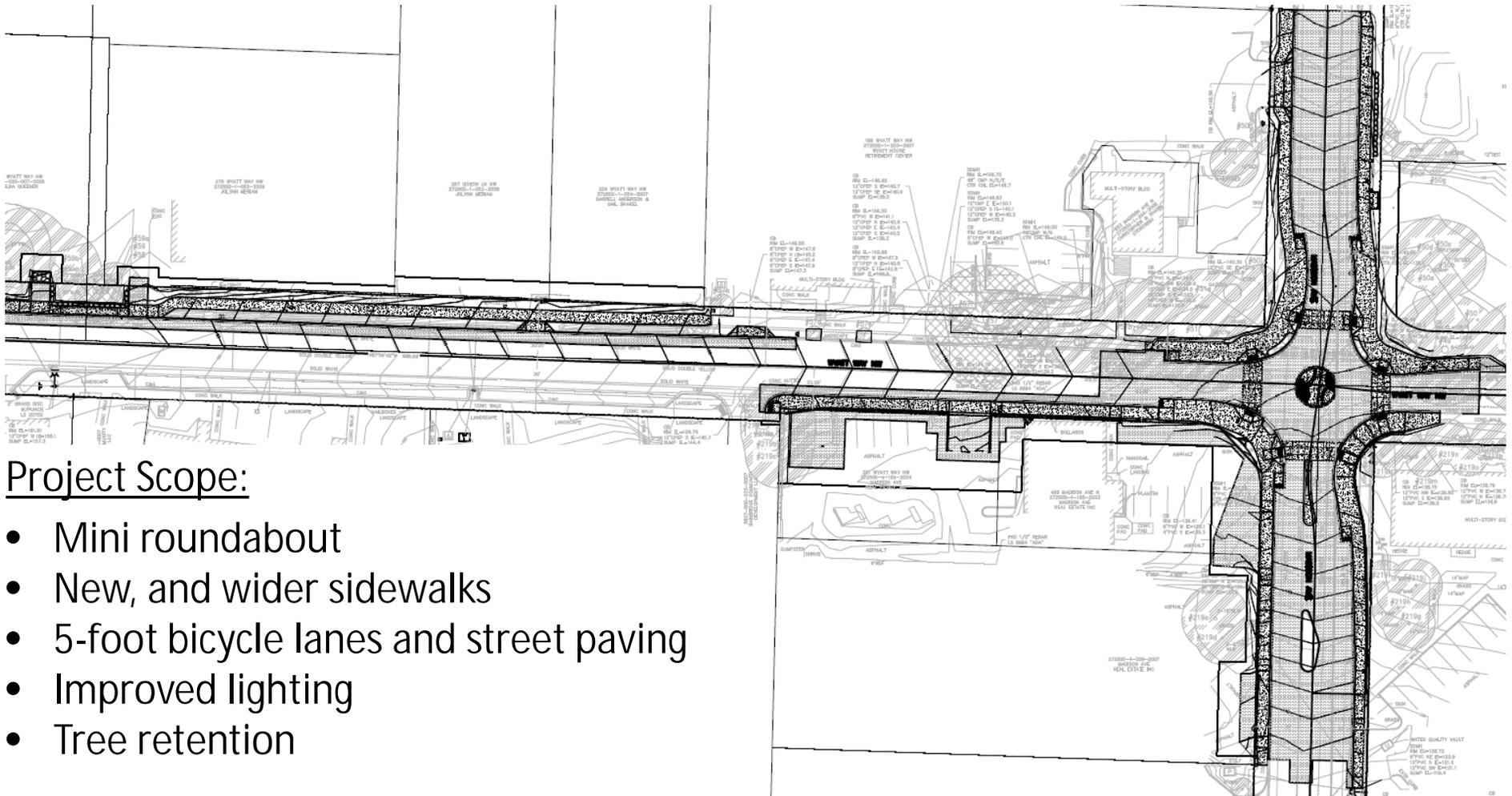
Wyatt Way Project Update

1. Project Update / Scope Overview
2. Budget Amendment Summary, Water
3. Budget Amendment Summary, General Fund

Wyatt Way Project Update – Project Overview



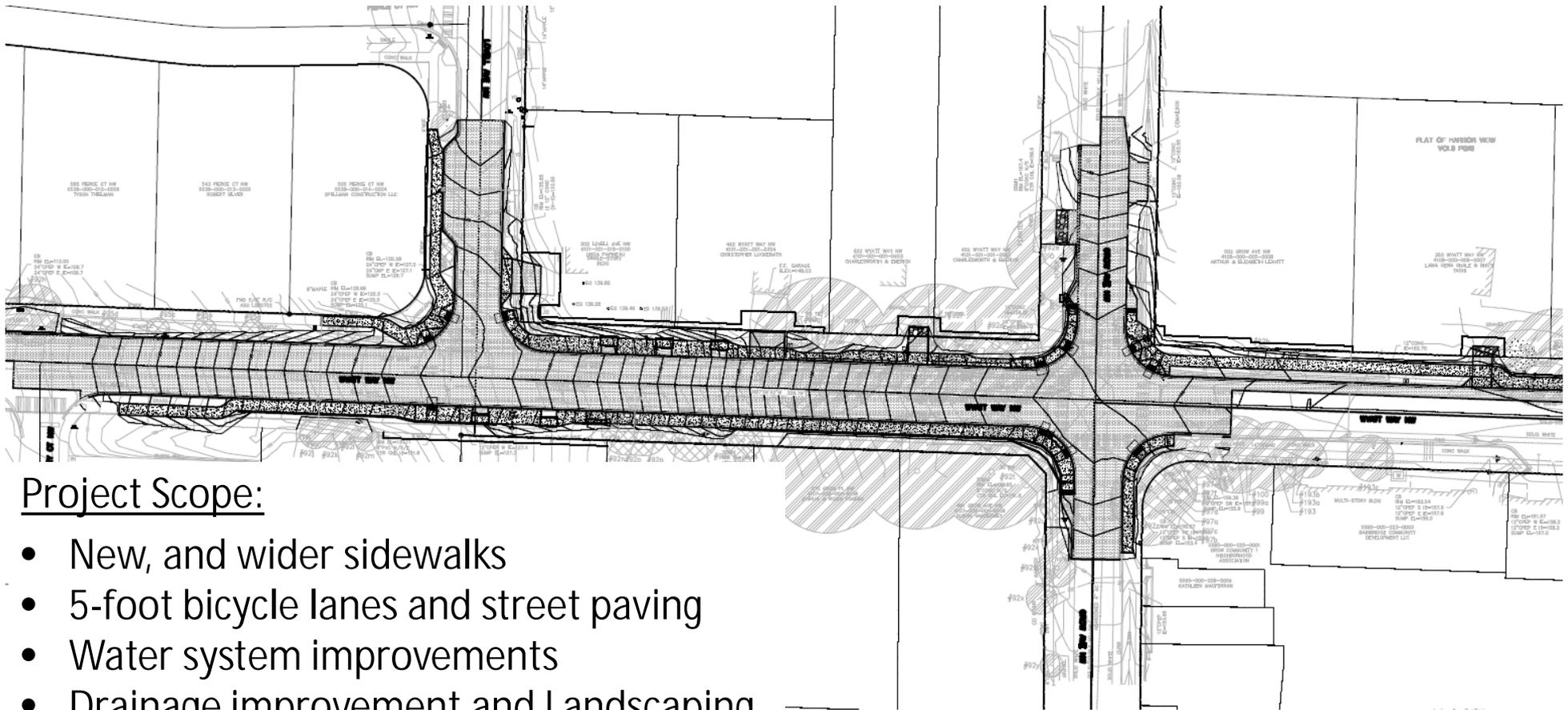
Wyatt Way Project Update – Project Overview



Project Scope:

- Mini roundabout
- New, and wider sidewalks
- 5-foot bicycle lanes and street paving
- Improved lighting
- Tree retention

Wyatt Way Project Update – Project Overview



Project Scope:

- New, and wider sidewalks
- 5-foot bicycle lanes and street paving
- Water system improvements
- Drainage improvement and Landscaping

Wyatt Way Project Update – Current Budget Status

Capital Funding (1000's)					
	Prior Yrs.	2019	2020	Subsequent	Total
FUNDING SOURCES (1000's)					
General Fund	\$ 1,184,000	-	-	-	1,184,000
State Grant	2,516,000	-	-	-	2,516,000
Water Fund	150,000	-	-	-	150,000
	3,850,000	-	-	-	\$ 3,850,000
Budget Notes					
	Amount	Source		Description	
Original budget	\$ 3,700,000	2015-2016 CIP		Original project authorization	
Budget Amendments	150,000	2017Q1 BUA (Water Fund)		Water component added	
Total Project Budget	\$ 3,850,000				
Financial Update					
Spending through December 30, 2019					
	Life to Date Budget	Life to Date Actuals	Encumbrances	Actuals + Encumbrances	Remaining
General Fund	\$ 3,700,000	898,997	76,393	975,391	2,724,609
Water	150,000	21,299	8,701	30,000	120,000
	3,850,000	920,296	85,095	1,005,391	\$ 2,844,609

Wyatt Way Project Update – Budget Amendment, Water

Current Remaining Budget: \$150,000

Current Project Estimate: \$225,000

Reasoning:

- Additional water main replacement added to the project
- Improved estimates of pressure release valves from other previous City work

10% Contingency: \$22,500

Total: \$247,500

Total Budget Amendment \$127,500

Wyatt Way Project Update – Budget Amendment, General Fund

Current Remaining Budget: \$2,724,609

Current Project Estimate: \$2,734,418

Reasoning:

- CIP project estimates are several years old
- Project was value engineered to lower costs

10% Contingency: \$273,442

Construction Services: \$25,000

Engineering, materials testing, etc.

Total: \$3,032,860

Total Budget Amendment \$308,521

Wyatt Way Project Update Next Steps

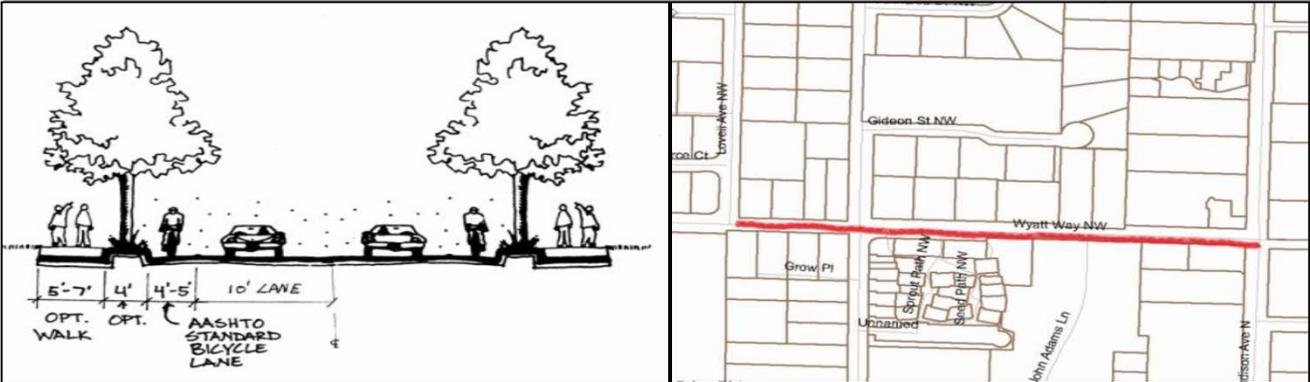
- Advertisement early Spring 2020
- Council approval of construction contract late Spring 2020
- Construction Summer 2020

Project: Wyatt Way Reconstruction

Location: Madison to Lovell

00708

Project Description



Description: Capacity (level of service) improvements to the intersection of Madison Avenue and Wyatt Way, including a roundabout. Complete sidewalk and bicycle facilities on both sides of Wyatt from Madison to Lovell. Reconstruct roadway surfacing and drainage. Additional right of way needed along frontage. Design 50% completed in 2006. State (TIB) grant funding received in 2015.

Capital Funding (1000's)

	Prior Yrs.	2019	2020	Subsequent	Total
FUNDING SOURCES (1000's)					
General Fund	\$ 1,184,000	-	-	-	1,184,000
State Grant	2,516,000	-	-	-	2,516,000
Water Fund	150,000	-	-	-	150,000
	3,850,000	-	-	-	\$ 3,850,000

	Amount	Source	Description
Original budget	\$ 3,700,000	2015-2016 CIP	Original project authorization
Budget Amendments	150,000	2017Q1 BUA (Water Fund)	Water component added
Total Project Budget	\$ 3,850,000		

Financial Update

Spending through December 9, 2019

	Life to Date Budget	Life to Date Actuals	Encumbrances	Actuals + Encumbrances	Remaining
General Fund	\$ 3,700,000	846,697	127,870	974,567	2,725,433
Water	150,000	18,676	11,324	30,000	120,000
	3,850,000	865,373	139,194	1,004,567	\$ 2,845,433

Current Project Status

Right of way acquisition completed. Finalizing permitting and design for advertisement in early 2020.



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (7:15 PM) Affirm 2020 City Council Top Priorities,

SUMMARY: To affirm the 2020 Top Priorities for the City Council. A draft list is attached for review and discussion.

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: I move to affirm the 2020 City Council top priorities.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND: This draft list was discussed by the City Council at the January 7 study session and the attached version reflects changes that were proposed at that time.

ATTACHMENTS:

[DRAFT - 2020 City Council Priorities.docx](#)

FISCAL DETAILS:

Fund Name(s):

Coding:



City Council's Top Priorities for 2020

Climate Change

- Climate Action Plan
- Sustainable Transportation Plan
- Green Building Policies

Affordable Housing

- Suzuki Affordable Housing Project
- Other Initiatives

Groundwater Management Plan

2021-2022 Budget and Capital Plans



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (7:20 PM) Affirm 2020 Citywide Workplan Priorities - Executive,

SUMMARY: To affirm 2020 Workplan Priorities and focus for Q1-2020 tasks.

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: I move to affirm the 2020 Citywide workplan priorities.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND: Annually, the City Council and staff review the key workplan items identified for the coming year. This workplan reflects the City's key activities and projects, and progress is formally reported at mid-year (June 30) and year-end (December 31).

The information on 2020 workplans and Q1 focus was presented to the Council at the January 7, 2020 study session.

ATTACHMENTS:

[Q1-2020 Workplan Focus.pdf](#)

[2020 Citywide Workplan Priorities](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

Q1-2020 Priority Items:

Task	Dept.	Next Step/Notes	Complexity
HIGHEST PRIORITY			
Suzuki project	Exec	Council decisions	
Police/Court facility	Exec	Council decisions/permitting/finance	
WSDOT/Hwy. 305/Day Rd. issues	PW	Council decisions (as needed)	
Sustainable Transportation workplan	PW	Council educational briefing, launch	
Climate Action Plan	Exec	Council receives draft CAP	
Moratorium on Self-Storage Facilities	PCD	Council decisions	
Green Building workplan	PCD	Council appoints TF members	
City Council annual planning/retreat	Exec	Council decisions	

Planning & Community Dev.	Next Step/Notes	Complexity
Island Center SubArea Plan	Committee rec/public meeting	
Inclusionary Zoning/MFTE	Council briefing/decisions	
Additional ADU/RV/tiny home changes	Council decisions	
Resume SMP periodic review	Internal	
SMP amendments	Internal	
Resume CAO review	Internal	
Previous ADU/tiny home changes	Council approval	
Previous Sign Code changes to Council	Council approval	
Fill PCD vacancies	Internal	
Building & Dev. Svcs. Rate Study	Internal	

Public Works	Next Step/Notes	Complexity
N. Brooklyn/Sportsman Club roundabout	Council briefing/decisions	
Dana's Trail project	Council briefing/decisions	
Visconsi trail segment plans	Council briefing/decisions	
Town Square Cover project plans	Council briefing/decisions	
PSE Community Solar project	Council briefing/decisions	
Groundwater Management Plan	Hiring, workplan	
Wyatt Way project	Project design, outreach info	
Fill Capital Manager vacancy	Internal	

Exec/Fin/Legal	Next Step/Notes	Complexity
Public Farmland management options	Council Ad Hoc review	
AHB funding request and Something New	Council briefing/decisions	
PSE franchise renewal	Council briefing/Internal	
Implement RETF recommendations	Internal	
"City Academy" proposal	Council briefing/decisions	
Closing for CHI property purchase	Internal	
2021-22 Biennial Budget planning	Council briefing/internal	
2021-29 Capital Improvement Plans	Council briefing/decisions	



**CITY OF
BAINBRIDGE ISLAND**

2020 Workplan Priorities

January 7, 2020

EXECUTIVE – 2020 Highest Priorities

Task	Planned
Complete closing for purchase of Harrison property	Q1
Implement changes to Ethics Program	Q1
Support Council review/adoption of Climate Action Plan	Q1 – Q2
Support Council decision-making on Suzuki affordable housing project	Q1 – Q4
Support Council consideration of I-976 impacts	Q1 – Q4
Support RETF outreach workplan	Q1 – Q4
Manage GARE technical assistance project	Q1 – Q4
Support Council consideration of public farmland framework	Q1 – Q4
Support Council consideration of BIMPRD option to manage City Dock	Q1
Support Council consideration of “City Academy” project	Q1
Support Council consideration of use of LTAC funds for affordable housing	Q1 – Q2
Support Council plans for workshop on Teen Mental Health	Q1-Q4
Facilitate Council review of ongoing funding for Public Art Committee/AHB and plans for “Something New” rotating artwork project	Q1
Review and affirm Communications Plan Initiatives: <ul style="list-style-type: none"> • COBI Connects • Project outreach info • Website improvements • National Citizens Survey 	Q1
Police/Court facility: <ul style="list-style-type: none"> • Complete final design • Issue bid docs • Select construction contractor • Initiate construction • Internal transition plans 	Q1 - Q4
Emergency Preparedness: <ul style="list-style-type: none"> • Continue Map Your Neighborhood outreach • complete MOUs with community partners for Hubs and Shelters • Plan and execute quarterly EOC exercises 	Q1 – Q4
Plan for 2021 Community Needs Assessment	Q2 - Q3 2020

EXECUTIVE – 2020 Other Priorities

Task	Planned
Support installation of 2020 “Something New” public artwork	Q1
Revise and update City real property surplus process	Q1
Implement closed captioning for City Council meetings	Q1
Resolve Crawford shade covenant issues	Q1 – Q2
Continue to investigate options to improve community cellular service	Q1 – Q4
Establish franchise agreements with utilities located in City right-of-way (e.g., KPUD, Verizon, etc.)	Q1 – Q4
Support 2021 LTAC funding cycle	Q2
Support 2021-2022 Human Services funding cycle	Q2
Complete annual update to GHG inventory dataset	Q3
Revise and update City special event permit process	Q1 - Q3
Complete disposition of designated surplus property (Pritchard, IslandWood Easement, Manitou).	Q1 – Q4
Complete Code changes to convert Human Services Funding Advisory Committee to a Task Force	Q1
Complete Code changes to convert Cultural Funding Advisory Committee to a Task Force	Q1
Consider rules related to Sexually Violent Predator Housing	TBD
Support City participation in opioid lawsuit	TBD
Identify options for WSF viewing platform	TBD

FINANCE – 2020 Highest Priorities

Task	Planned
Plan and complete Biennial 2021-2022 Budget	Q1 – Q4
Support Council long-range planning to address I-976 impacts	Q1
Police/Court project tracking and reporting	Q1 – Q4
Develop community information on Prior Year actuals and Current Year budget	Q1 - Q2
Submit 2019 Financial Reporting for Certificate of Excellence in Financial Reporting (CAFR) award	Q2

PLANNING & COMMUNITY DEVELOPMENT – 2020 Highest Priorities

Task	Planned
Support Council consideration of Green Building Initiatives <ul style="list-style-type: none"> to include consideration of proposed solar ordinances 	Q1 – Q4
Support Council considerations of Inclusionary Zoning and Multi-Family Tax Exemption programs	Q1 – Q4
Confirm timing/approach for Winslow Master Plan update	Q1
Support Council review of rules related to self-storage facilities	Q1 – Q2
Support Council completion of remaining workplan items associated with Development Moratorium	Q1 – Q2
Complete revisions to Native Vegetation, Landmark Trees <ul style="list-style-type: none"> Develop and implement change in noticing requirements for tree clearing 	Q1 - Q2
Complete Island Center Subarea Plan	Q1 – Q3
Complete administrative review of Critical Areas Ordinance	Q1 - Q2
Complete changes to Sign Code	Q1 – Q2
Complete changes to Code Enforcement	Q1
Complete SMP Limited Amendment	Q1
Complete SMP 2020 Periodic Update	Q1 – Q4
Complete Building & Development Services Rate Study	Q1 – Q3
Support Council consideration of HB 1923 affordable housing planning grants	Q2
Support Council consideration of TDR changes/ARL Designation	Q2 – Q4
Support Council consideration of changes to common ownership of ADU's	Q2 – Q4
Support Council consideration of ordinance to allow RV's as permanent housing	Q2 – Q4
Support Council consideration of rules for tiny home villages	Q2 – Q4
Complete International Building Code Update	Q1 – Q4

PLANNING & COMMUNITY DEVELOPMENT – 2020 Other Priorities

Task	Planned
Complete Administrative Corrections to Title 18 <ul style="list-style-type: none"> • Complete clarifications of Use definitions • Develop and implement requirements for off-site construction staging • 	Q1
Continue Department Process Improvements <ul style="list-style-type: none"> • Training on permitting software • Provide additional on-line permits • Standardize reporting and templates 	Q1 - Q4
Implement Emergency Management Response Kits for Building Inspectors	Q3
Implement enhanced SMP monitoring, outreach, stewardship & restoration projects	Q2 - Q4
Bi-annual Code Consistency Amendments <ul style="list-style-type: none"> • Consistency changes to Parking Standards • Consistency changes to Dimensional Standards 	Q3 – Q4
Amend Addressing for County Consistency	Q2
Amend SEPA ordinance to reflect updates approved by State in 2014	Q3 - Q4
Review Noise Standards	TBD
Initiate Winslow Master Plan update	TBD
Initiate additional Subarea Plan update (TBD)	TBD

POLICE – 2020 Highest Priorities

Task	Planned
Camera Systems: <ul style="list-style-type: none"> • Complete implementation of body cameras per MOU 	Q1
Police/Municipal Court Replacement Project: <ul style="list-style-type: none"> • Support completion of final design • Support facility transition plans 	Q1 – Q4
Inventory System: <ul style="list-style-type: none"> • Replace manual inventory system with software to improve tracking and planning for replacement cycles 	Q1 – Q4
Professional Development: <ul style="list-style-type: none"> • Coordinate with CJTC and WASPC to achieve compliance with new I-940 requirements 	Q1 – Q4
Records Management System (RMS): <ul style="list-style-type: none"> • Coordinate as needed per Kitsap County transition to new RMS • Ensure City budget planning for estimate \$200k COBI contribution 	Q1 – Q4
Traffic Emphasis: <ul style="list-style-type: none"> • Continue work to coordinate via a designated traffic improvement officer • Consider purchase of additional hand-held radar gun • Consider purchase of additional speed signs 	Q1 – Q4

PUBLIC WORKS – 2020 Highest Priorities

Task	Planned
Support Sustainable Transportation Project	Q1 – Q4
Support Groundwater Management Plan: <ul style="list-style-type: none"> • Hire hydrogeologist • Review workplan with Council, ETAC • Create task force • Launch workplan 	Q1 – Q4
Support design options and financing issues for WSDOT/Day Rd. project	Q1 – Q2
Sportsman Club/New Brooklyn Roundabout – Complete Design	Q1 – Q4
Wyatt Way Roundabout and Improvements – Complete Design and construct	Q1 – Q4
Lead PSE franchise renewal process – Phase I	Q1 – Q4
Lead updates to Citywide Capital Improvement Plan	Q1 – Q4
Support PSE community solar project	Q1 – Q4
Design and complete Dana’s Trail project/improvements planned for BISD property	Q1 – Q4
Complete pre-design for Winslow Water Tank replacement	Q1 – Q4
Support annual rotation of “Something New” public art program (design and install 2 new bases)	Q1 – Q4
Complete Winslow wayfinding project	Q1 – Q4
Complete identified traffic calming projects	Q1 – Q2
Complete changes to Fire Code/Coordination with BIFD	Q1 – Q4
Support Council consideration of design options for Town Square cover	Q1 – Q4
Support Council consideration of BIMPRD collaboration on trail projects	Q1 - Q2
Support Council consideration of proposed improvements to Bainbridge Island Senior Community Center (BISCC)	Q1 – Q4
Support Council consideration of proposed improvements to City Hall	Q1 – Q4
Support Council consideration of City Dock expansion options	Q1
Complete study to upgrade WWTP to tertiary treatment	Q1 – Q4

PUBLIC WORKS – 2020 Highest Priorities (continued)

High School Road Safety Improvements – complete design and construct	Q1 – Q4
Support completion of STO trail segment by Visconsi	Q1 – Q3
Support PSE Brien Drive power undergrounding and electric car charging station	Q1 – Q3
Complete Eagle Harbor Drive McDonald Creek Culvert and other scheduled culvert repairs	Q1 – Q4
Complete Country Club road bulkhead repair	Q1 – Q4
Initiate design for Wood, Lovell, Sunday Cove lift station upgrades	Q1 – Q4
Initiate work to assess site options at Vincent Road property	TBD

PUBLIC WORKS – 2020 Other Priorities

Task	Planned
Adopt ordinance to regulate Fats, Oil and Grease (FOG) in City sewer system	Q3 – Q4
Develop and implement noticing requirements for City capital projects	Q3 – Q4
Complete implementation of short-term recommendations from parking study	TBD
Complete consistency changes to Design and Construction Standards	Q1 – Q3
Complete consistency changes to stormwater Code	Q3 – Q4
Continue Major Maintenance Projects per 2018 Facility Assessment	Q1 – Q4
Scope and commence Islandwide stormwater study	Q2 – Q4
Pursue agency accreditation through APWA	Q1 – Q4
Improve administration of road approach permitting	Q2 – Q3
Consolidate Codes related to right of way (ROW)	Q2 – Q3
Update fees for Traffic Concurrency and Mitigation	Q2 – Q4
Update BIMC related to recovery of infrastructure costs (charge period for latecomers, bonding for civil improvements)	Q3 – Q4
Complete SCADA upgrades	Q1 – Q4



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: (7:25 PM) Affirm 2020 Transportation Benefit Fund Spending Plan for Road Repairs and Maintenance - Finance,

SUMMARY: In 2020, there is \$400,000 in budgeted expenditures in the Transportation Benefit Fund (TBF) which is approximately 60% of the funding for the City's annual roads program. This agenda item is for the Council to discuss the use of existing Transportation Benefit Fund resources from fund balance to support the existing 2020 budgeted annual roads maintenance and repair program.

AGENDA CATEGORY: Discussion

PROPOSED BY: Finance & Administrative Services

RECOMMENDED MOTION: I move to approve the use of existing Transportation Benefit Fund fund balance to support the 2020 Approved Budget spending plan for road repairs and maintenance.

STRATEGIC PRIORITY: Reliable Infrastructure and Connected Mobility

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	Yes

BACKGROUND: Washington Initiative 976 (I-976) is a ballot measure that voters passed November 2019 that reduces the State's vehicle car-tab fees to \$30 and limits funding for State and local highway, transit, and safety improvements. The initiative eliminates the City's vehicle license fee. I-976 was set to take effect December 5, 2019. However, King County Superior Court Judge Marshall Ferguson issued an order November 27, 2019, temporarily halting implementation of the initiative. The order instructs the State to continue collecting car-tab taxes and distribute proceeds to government agencies that use the fees. The plaintiffs are challenging the initiative on constitutional grounds, arguing that the ballot title language was misleading, and that the initiative causes substantial injury to the plaintiffs. It is the City's understanding that if the plaintiffs' challenge fails, the State would be instructed to issue refunds to taxpayers. As a result of the order, the City will continue to receive these funds but will not be allowed to spend these resources until such time as a final disposition is determined. According to the Kitsap County Auditor's Office, 78% of Bainbridge Island voters opposed the initiative.

Assuming the initiative will move forward as intended, it will result in the City losing its authority to collect close to \$600,000 per year from the Vehicle License Fee in the Transportation Benefit Fund in 2020 and beyond. The

City Transportation Benefit Fund is funded almost exclusively through vehicle license fees. Since 2014, the City has used, on average, \$400,000 per year of these funds to support maintenance of the City's road network or about 60 percent of the total spending on the City's annual road maintenance program. In 2020, there is \$400,000 budgeted in this fund to support maintenance of the City's road network.

On November 12, 2019, City staff presented the Council (see attached presentation) options to address the 2020 spending plan related to the Transportation Benefit Fund. The current decision point is whether the City should continue to support the current \$400,000 planned level of service for 2020 by using TBF fund balance.

Later in 2020, staff will work with Council to review longer-term options to address the anticipated funding shortfall. These options could include:

- a. Reduce the amount of road maintenance activities;
- b. Seek new revenue sources to replace the TBD car tab revenue; and/or
- c. Divert City funds from other programs and services to fund this work.

ATTACHMENTS:

[Presentation TBD 11122019 \(Revised 011420\)](#)

FISCAL DETAILS: There will be a loss of revenue of approximately \$600,000 in 2020 in the Transportation Benefit Fund. The final fund balance for the 2019 Transportation Benefit Fund is projected to be approximately \$900,000. This equates to about 2 years of funding of annual road services at the existing levels. Currently there is \$400,000 in the 2020 Adopted Budget for anticipated expenditures to support maintenance of the City's road network.

Fund Name(s): Other

Coding:



CITY OF
BAINBRIDGE ISLAND

Passage of Initiative 976

November 12, 2019 (Revised January 14, 2020)

Impacts and Next Steps

I-976 Impacts and Next Steps

Background:

- ❖ I-976 passed by statewide voters on November 5
 - Effective December 5 the City will no longer receive the \$30 vehicle license fee revenue
 - However, King County Superior Court issued an order temporarily halting implementation of the initiative. State Supreme Court upheld injunction while legal fight over the constitutionality plays out
- ❖ Kitsap County residents – 50.2% in favor of the initiative.
- ❖ 78 % Bainbridge Island Voters voted against the initiative

I-976 Impacts and Next Steps

- ❖ 2016 – 2018 vehicle license fee revenue
 - Annual revenue approximately \$420,000
 - Used \$400,000 annually for chip seal and asphalt repair

- ❖ 2019 vehicle license fee
 - Fee increased from \$20 to \$30 in August
 - Increased revenue additional \$200,000 annually intended for traffic calming and climate change mitigation projects
 - 2019 revenue estimate total \$470,000 including \$70,000 due to fee increase

Transportation Benefit Fund Balance

Year-end 2019 unallocated Transportation Benefit Fund balance:

- ❖ Estimated at roughly \$900,000
- ❖ Assumes 2019 spending of \$400,000 for annual roads program

Near-term Decisions

Use available fund balance to support current or reduced service levels

- ❖ Can fund next two years (2020 and 2021) of services at existing levels from current TBD fund balance
- ❖ No budget adjustment or Council action necessary for 2019 or 2020
- ❖ 2021 falls into a new budget cycle. Council decisions will guide funding sources and services

Long-term Decisions

Consider funding options to maintain annual roads repair and replace TBD revenue

- ❖ Divert City funds from other programs to fund activities at existing or reduced levels of service
- ❖ Seek new revenue sources to replace the TBD car tab revenue

Next Steps

❖ Administrative:

- Update City Financial Policies
- Update agreement with Washington Department of Licensing

❖ Additional Council discussion on long-term options as part of 2021-2022 budget development in Q1/Q2 2020



DISCUSSION



QUESTIONS



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: (7:35 PM) City Council Committee and Liaison Assignments - City Council,

SUMMARY: The Council will discuss committee and liaison assignments for 2020. This topic was previously discussed at the January 7, 2020 study session.

AGENDA CATEGORY: Discussion

PROPOSED BY: City Council

RECOMMENDED MOTION: I move to approve the Council liaison assignments for 2020.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Draft - 2020 Council Assignments 1-10-20.docx](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

LOCAL AND REGIONAL BOARD / COMMITTEE ASSIGNMENTS

Group	Meeting Date	Time	Location	2020 Assignments
Bainbridge Island Healthy Youth Alliance	Quarterly		Bainbridge	Schneider
Hwy 305 Task Force	As called		Suquamish, usually	Schneider, Medina, Deets
Housing Kitsap Board	1 st and 3 rd Tuesdays	3:15 pm/ 11:00 am	Bremerton	Tirman
Intergovernmental Work Group	Quarterly; 3 rd Monday	5:30 PM	Bainbridge	Tirman, Medina
Kitsap 911 Board	1 st Tuesday (some)	12:30 pm	Bremerton	Medina
Kitsap Economic Development Alliance	3 rd Thursday on quarterly basis	3:00 – 6:00 p.m.	Various county locations	Medina, Deets
Kitsap Emergency Management Council	1 st Tuesday (some)	12:30 pm	Bremerton	Medina
Kitsap Health District Board	1 st Tuesday	1:30	Bremerton	Medina

LOCAL AND REGIONAL BOARD / COMMITTEE ASSIGNMENTS

Group	Meeting Date	Time	Location	2019 Assignments	2020 Assignments
Kitsap Regional Coordinating Council (KRCC) Executive Board	1 st Tuesday	10:15 a.m.	Bremerton	Medina, Tirman	Medina, Tirman
KRCC Transportation Policy Board	3 rd Thursday (not August or Nov.)	1:00 p.m.	Bremerton	Tirman, Medina (alternate)	Schneider, Tirman (alternate)
KRCC Land Use Policy Board	3 rd Thursday (only 4 meetings in 2018)	2:45 p.m.	Bremerton	Nassar, Peltier (alternate)	Nassar
Kitsap Transit Board	1 st and 3 rd Tuesdays	8:30 am	Bremerton	Medina	Medina
Puget Sound Clean Air Agency Advisory Council	2 nd Wednesdays (5-8 meetings a year)	9:00 am	Seattle	Schneider	Pollock
Puget Sound Regional Council Transportation Policy Board			Seattle	Tirman (alternate)	Pollock
Puget Sound Regional Council Growth Management Policy Board			Seattle	Peltier (alternate)	Pollock
West Central Local Integrating Organization	Fridays, Quarterly	varies	Bremerton	Medina	Medina
West Sound Alliance	As called		Bremerton	Nassar	Nassar

CITY OF BAINBRIDGE ISLAND ADVISORY COMMITTEES AND COMMISSIONS

Group	Meeting Date	Time	2019 Assignments	2020 Assignments
Climate Change Advisory Committee	3 rd Wednesday	6:15 p.m.	Deets	Hytopoulos, Deets
Cultural Funding Advisory Committee – Council member acts as liaison and non-voting Chair	Summer/autumn 2019	TBD	Nassar (Chair), Schneider (Co-chair)	Nassar (Chair), Schneider (Co-chair)
Design Review Board	1 st /3 rd Mondays	2:00 PM	Peltier	Schneider
Environmental Technical Advisory Committee	2 nd Thursday	3:00 pm	Nassar	Nassar
Historic Preservation Commission	1 st Thursday	2:00 pm	Blossom	???
Human Services Funding Advisory Committee	Summer/autumn 2020		Schneider, Tirman (from 2018 cycle)	Schneider, Tirman
Island Center Subarea Plan Steering Committee	1 st /3 rd Wednesdays	6:00 p.m.	Blossom	Pollock
LEOFF 1 Disability Board – 2 Council members are members	TBD	TBD	TBD	TBD
Lodging Tax Advisory Committee – Council member acts as Chair; second Council member is non-voting Vice-Chair	Spring/Summer		Nassar (Chair); Tirman (Vice Chair)	Tirman (Chair) Hytopoulos (Vice Chair)
Planning Commission	2 nd /4 th Thursdays	7:00 pm	Blossom	Hytopoulos, Pollock (alternate?)
Public Art Committee	??	??	Schneider	Schneider
Salary Commission	TBD	TBD	N/A	TBD
Utility Advisory Committee	2nd Wednesday	5:00 pm	Nassar	Nassar

CITY COUNCIL AD HOC COMMITTEES

Group	Meeting Date	Time	2019 Assignments	2020 Assignments
Youth Mental Health Workshop Proposal			Deets, Tirman, Nassar	Deets, Tirman, Nassar

CITY OF BAINBRIDGE ISLAND TASK FORCES

Group	Meeting Date	Time	2019 Assignments	2020 Assignments
Race Equity Task Force – Council members are liaisons	1 st Thursday	6:30 p.m.	Nassar, Deets	Nassar, Deets
Green Building Task Force	TBD	TBD	N/A	Deets, Pollock
Sustainable Transportation Task Force	TBD	TBD	N/A	???



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: (7:45 PM) Settlement Agreement with Whitney Equipment Company, Inc., Relating to the Village Pump Station Replacement Project,

SUMMARY: As part of the Village Pump Station Replacement Project, the City purchased a packaged pump station from Whitney Equipment Company, Inc. ("WECI"). After the packaged pump station was installed at the project site, a contractual dispute arose between the City and WECI relating to the performance of the packaged pump station. If approved by Council, the attached Settlement Agreement and Release of Claims ("Agreement") would resolve this dispute. Under the proposed Agreement, the City would only pay WECI the amount previously approved by Council in the original contract with WECI for the purchase of the packaged pump station.

Council consideration of this Settlement Agreement was delayed due to the holiday break. In the interest of reaching a timely resolution to this dispute, Council is asked to consider immediate approval of this Settlement Agreement.

AGENDA CATEGORY: Contract

PROPOSED BY: Public Works

RECOMMENDED MOTION:

I move to authorize the City Manager to execute the settlement agreement and release of claims with Whitney Equipment Company, Inc.

STRATEGIC PRIORITY: Reliable Infrastructure and Connected Mobility

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	\$126,000
Included in Current Budget?	Yes

BACKGROUND: The Village Pump Station Replacement Project consisted of the installation of a package pump station, purchased from Whitney Equipment Company, Inc. ("WECI"), with connections to existing force mains, electrical, telemetry, and removal of existing pump station and structures.

The Village Pump Station Project site is located in the southeast corner of the existing development at Hildebrand Lane. This pump station is the 2nd largest in the City and more than a dozen pump stations feed

into the Village sewer basin. It was originally constructed in the 1970s and, before this project, was never rebuilt and the wet well configuration was difficult to access and monitor due to the original design.

The dispute in question is two-fold, relating first to a disagreement regarding the ultimate long-term performance of the pump station and second from a failed crane that was included in the package. The first aspect of the dispute has been mitigated through efforts made by the contractor, sub-contractor, and City to modify the performance of the pumps installed within the packaged pump station and will be formally resolved through the proposed Agreement. The second aspect of the dispute will be resolved through the City's receipt of a new crane, plus the related information included in the Agreement that ensures the crane will be suitable for the intended task, including verification that the new crane can be effectively mounted to the lid of the wet well.

Under Section 15.4 of the City's Procurement Policy, City Council approval of the Settlement Agreement and Release of Claims is required as the proposed payment to WECl exceeds the approval authority delegated to the City Manager. Note, however, that the proposed payment is simply the amount previously approved by Council in the original contract with WECl for the purchase of the packaged pump station.

ATTACHMENTS:

[Settlement Agreement and Release of Claims](#)

[Exhibit A to Settlement Agreement and Release of Claims](#)

FISCAL DETAILS: The Budget for this project is \$550,000 in the Sewer Fund with \$363,867 spent leaving a balance of \$186,133 available to cover this cost.

Fund Name(s): Sewer Fund

Coding:

SETTLEMENT AGREEMENT AND RELEASE OF CLAIMS

This SETTLEMENT AGREEMENT AND RELEASE (the “Agreement”) is entered into by and between Whitney Equipment Company, Inc., a Washington State corporation, (“Whitney”), and City of Bainbridge Island, a Washington State municipal corporation, (the “City”). Whitney and the City are collectively referred to as the “Parties”.

WHEREAS, Whitney and City contracted in the Spring of 2018 relative to goods and services collectively referred to as a “Packaged Pump Station” in the Parties’ contract.

WHEREAS, Whitney was not the designer of record for the Packaged Pump Station.

WHEREAS, a dispute arose between Whitney and City regarding Whitney’s provision of the Packaged Pump Station, the Packaged Pump Station’s performance, and the City’s payment obligation for Whitney’s performance.

WHEREAS, in lieu of the expense and time involved in litigation, the Parties have agreed to the resolution, compromise, and settlement of all disputes, claims, and controversies among them as provided herein.

NOW, THEREFORE, in consideration of the mutual promises and obligations contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby stipulate and agree as follows:

- 1. Payment.** The City will pay Whitney \$126,000 within 15 days of the execution of this Agreement;
- 2. Provision of crane.** Within 21 days of the execution of this Agreement, Whitney will deliver to the City a Thern 5PT10 davit crane (the “Crane”). The City and Whitney will use their best reasonable effort to coordinate the Crane’s delivery. A spec sheet for the Crane and installation of the Crane is attached as Exhibit A. The City is responsible for installing the Crane and its proper use and maintenance when installed. All manufacturing warranties associated with the Crane are assigned to the City. Provided that the Crane is installed by the City per the specifications attached as Exhibit A, Whitney warrants that the Crane is fit for the particular purpose of raising and lowering the pumps installed within the Packaged Pump Station on the effective date of this Agreement.
- 3. Confidentiality of Agreement.** The Parties expressly understand and agree that this Agreement and its contents shall remain CONFIDENTIAL and shall not be disclosed to any third party whatsoever, except: (1) as may be required by virtue of public records requests and public records laws; (2) to assist in the enforcement of this Agreement’s terms; or (3) as required by other laws or order of court. Nothing contained in this paragraph shall prevent the Parties from stating that the Parties have “resolved all differences,” provided, however, that in so doing, the Parties shall not disclose any of the terms of this Agreement or the settlement described

herein except when disclosure is allowed under this paragraph. The Parties expressly understand and agree that nothing in this paragraph prevents the City Council from considering approval of this Agreement at an open public meeting, as required under state law and the City's procurement policy, or from this Agreement appearing as an agenda item for such a meeting.

4. **Future Work.** Whitney will not be prevented from bidding in the future on City projects, except when prohibited by operation of state or federal law.
5. **Mutual Release.** Except with regards to the promises contained within this Agreement, the Parties forever release each other, and each other's heirs, executors, administrators, successors, assigns, affiliates, and agents from any and all claims, demands, or causes of action, known or unknown, arising from or related to the Parties' contract, the Packaged Pump Station (including its future operation), or the subject matter of this Agreement.
6. **Consultation with Counsel.** The Parties acknowledge that in executing this Agreement they have carefully reviewed and had the opportunity to review the terms of this Agreement with counsel of their choice and are fully aware of the extent of their rights and obligations under this Agreement. The Parties further agree that the language of this Agreement shall not be construed presumptively against any of the parties to this Agreement.
7. **No Admission of Liability.** This Agreement shall not constitute an admission of any of the allegations against the other and shall not be considered as an admission of liability, wrongdoing, or anything improper.
8. **Modification.** This Agreement may not be amended, modified, or revoked except by means of a supplemental writing that is signed by the party against whom the amendment, modification, or revocation is to be enforced.
9. **No Other Representations or Warranties.** This Agreement contains the entire understanding of the Parties, and there are no representations, warranties, covenants, or undertakings other than those expressly set forth herein.
10. **Binding Agreement.** Except as otherwise provided by this Agreement, this Agreement is binding on the Parties and their respective successors, legal representatives, and assigns.
11. **No Third Party Benefit.** Except as otherwise provided by this Agreement, no other person or entity, other than the Parties to this Agreement, is intended to be released from liability to any party, nor is any other person or entity intended to benefit in any way from this Agreement.
12. **Governing Law and Venue.** This Agreement has been executed under and shall be construed in accordance with the laws of the State of Washington. If there is any

litigation or other proceeding to enforce or interpret any provision of this Agreement, the sole and exclusive venue shall be in Kitsap County Superior Court.

- 13. **Attorneys' Fees.** In the event of any suit, action, or arbitration to interpret or enforce the provisions of this Agreement, the prevailing party, as defined in RCW 4.84.330, shall be entitled to an award of its reasonable attorneys' fees, costs, and expenses incurred in such action or arbitration and in any appeal therefrom, in addition to all other remedies afforded the prevailing party.
- 14. **Construction.** The rule of construction that an agreement is to be construed against the drafting party is not to be applied in interpreting this Agreement. The Parties acknowledge that they have each read this Agreement, that they understand its meaning and intent, and that this Agreement has been executed voluntarily.
- 15. **Severability.** The invalidity of all or any part of any section of this Agreement shall not render invalid the remainder of this Agreement to the extent it represents the intent of the Parties in all material respects if interpreted without the invalid provision.
- 16. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which is to be deemed an original. All counterparts may be consolidated into one agreement, binding on all the Parties.
- 17. **Authority to Execute.** Each of the Parties represents to one another that they have the power and authority to enter into this Agreement and provide the Releases described herein.
- 18. **Effective Date.** Except as otherwise provided by this Agreement, this Agreement shall be effective and binding when executed.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the later of the signature dates included below.

City of Bainbridge

By: _____

Dated: _____

Its: _____

Whitney Equipment Company

By:  _____

Dated: 12/23/2019

Its: Vice President

EXHIBIT A

Structural Design Calculations

City of Bainbridge - RC611 Pump Station
Thern Commander Davit Crane 5PT10 (1200 lb Capacity)
Anchorage Design



Roberts Engineering PLLC
17503 NE 137th Street
Redmond, WA 98052-2182
(425) 556-0300
<http://RobertsEngineering.org>

[A] Discussion

Provide the anchorage design for the Thern Commander Davit Crane 5PT10 (1200 lb Capacity). Design per the references in Section [B] and the design criteria listed in Section [D]. Thern Commander Davit Crane 5PT10 (1200 lb Capacity) is located at grade.

Note: The typical pedestal base does not fit on the existing concrete vault. A new pedestal base has been detailed for this project based on the typical pedestal base to fit existing conditions.

See section [G] for Anchorage Details.

[B] References

Reference Documents	
Acronym	Source
Plans	One Lift Pump Station Plans dated 3/22/18
Shop Dwg	One Lift Pump Station Shop Drawings dated 2/2/18
Thern	Thern Product Information Package for the Commander Series Davit Crane
IBC	International Building Code (IBC), 2015 and Amendments
ASCE	ASCE 7-10: Minimum Design Loads for Buildings and Other Structures
ACI	ACI 318-14: Building Code Requirements for Structural Concrete

[C] Relevant Plans

From [Thern]:



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Project:	City of Bainbridge - RC611 Pump Station	Date:	7/2/2019
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From [Thern]:

CRANES AND WINCHES

COMMANDER SERIES

FINISHES

Crane Finishes for Commander Series

All cranes come standard with Electrostatic Powder Coat red finish. Four optional finishes also offered are Galvanized, 304 or 316 Stainless Steel, and corrosion-resistant Epoxy. Custom colors are available per customer request - Please contact factory.



powder coat



galvanized



3 part epoxy



304 stainless steel



316 stainless steel

Finish	Code	Model Number		Options	Description
		CMDR 1000	CMDR 2000		
Powder Coat (Red)	-	5PT10	5PT20	Standard N/C	Red electrostatic powder coating applied to all cranes - Good
Galvanized	G	5PT10G	5PT20G	Optional/Extra	An economical choice that provides extra protection - Better
Epoxy (Gray)	X	5PT10X	5PT20X	Optional/Extra	3-part epoxy is impact, fire, water, and slip-resistant - Best
304 Stainless Steel	S	5PT10S	5PT20S	Optional/Extra	Electro-polished for added protection - Premium
316 Stainless Steel	S316	5PT10S316	5PT20S316	Optional/Extra	A higher level of corrosion protection - Ultimate

WINCHES

For Commander Series



Hand Winches

Winch	Winch Model No.	Description	Finish	Approx. Ship Weight
M1	M4312PB-K	Spur gear hand winch with brake	Zinc Plated	27 lbs 13 kg
M2	4WM2-K	Worm gear hand winch with brake	Red Enamel	42 lbs 19.1 kg
M2X	4WM2EGRA-K	Worm gear hand winch with brake	Epoxy Paint (Gray)	42 lbs 19.1 kg
M3	M4312PBSS-K	Stainless steel spur gear hand winch with brake	Stainless Steel	27 lbs 13 kg

All hand winches include disc brake for load control and steel gear covers to protect gears and help prevent injuries. NOTE: Worm gear requires more turns with less effort than a spur gear winch.



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From [Them]:

Commander 1000 Performance Ratings²

	Boom Position	Load Rating	
		(lb)	(kg)
BLUE RANGE	A-1	1000	453
	A-2	800	362
	A-3	650	294
	A-4	550	249
GREEN RANGE	B-1	1200	544
	B-2	950	430
	B-3	750	340
	B-4	650	294
GREEN RANGE	C-1	1200	544
	C-2	950	430
	C-3	750	340
	C-4	650	294

range indicator

Them products are not for lifting people, or things over people.

From [Them]:

Commander 1000 On Pedestal Base Reach & Height Above Floor

Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A-1	36	914	42	1066
A-2	46	1168	42	1066
A-3	56	1422	42	1066
A-4	66	1676	42	1066
B-1	29	736	56	1422
B-2	38	965	60	1524
B-3	47	1193	65	1651
B-4	56	1422	69	1752
C-1	22	558	64	1625
C-2	29	736	71	1803
C-3	36	914	78	1981
C-4	43	1092	85	2159

Dimensions are for reference only and subject to change without notice.

PERFORMANCE

COMMANDER 1000

hook reach: 12 in (305 mm), 24 in (610 mm), 36 in (914 mm), 48 in (1219 mm), 60 in (1524 mm), 72 in (1829 mm), 84 in (2134 mm)

hook height: 12 in (305 mm), 24 in (610 mm), 36 in (914 mm), 48 in (1219 mm), 60 in (1524 mm), 72 in (1829 mm), 84 in (2134 mm), 96 in (2438 mm), 108 in (2743 mm)

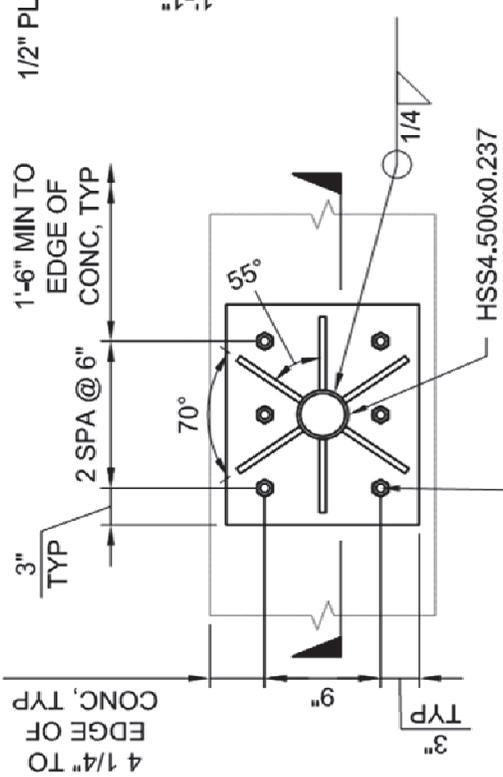


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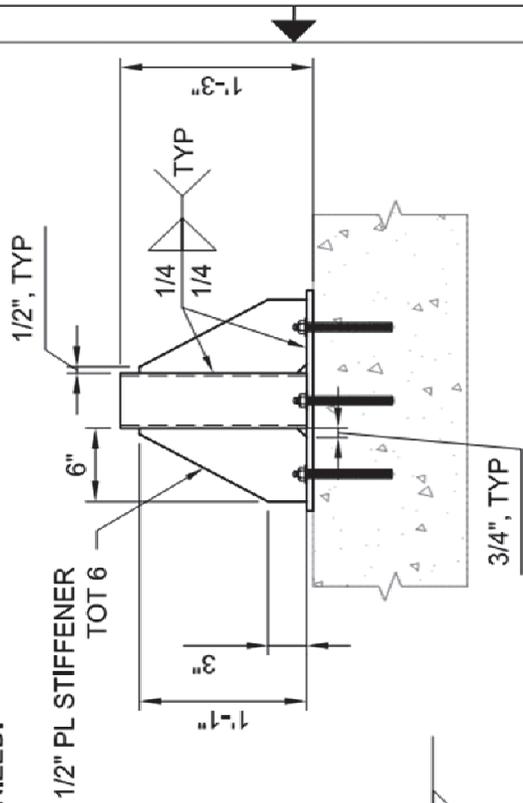
GENERAL NOTES:

1. EDGE DISTANCE FOR EPOXY ANCHORS SHALL BE AS SHOWN BELOW.
2. ALL PLATES SHALL BE ASTM A36 GRADE 36 KSI.
3. ALL HSS SHALL BE ASTM A500 GR B OR ASTM A1085.
4. WELDING:
 - 4.1. ALL WELDING SHALL BE PERFORMED BY AWS OR WABO CERTIFIED WELDERS.
 - 4.2. ALL WELDING SHALL BE PERFORMED WITH E70xx ELECTRODES.
5. COMPLETED ASSEMBLY SHALL BE HOT DIP GALVANIZED.



(6) 1/2" DIA ASTM F593 TYPE 316 SST
 THREADED ROD WITH HILTI HIT-RE
 500 V3 AND ASTM F594 GROUP 2
 TYPE 316 SST NUTS AND WASHERS
 WITH 8 1/2" MIN EMBEDMENT

PLAN



SECTION

ROBERTS ENGINEERING PLLC

DAVIT CRANE MOUNTING BASE

SCALE 1" = 1'-0" SHEET

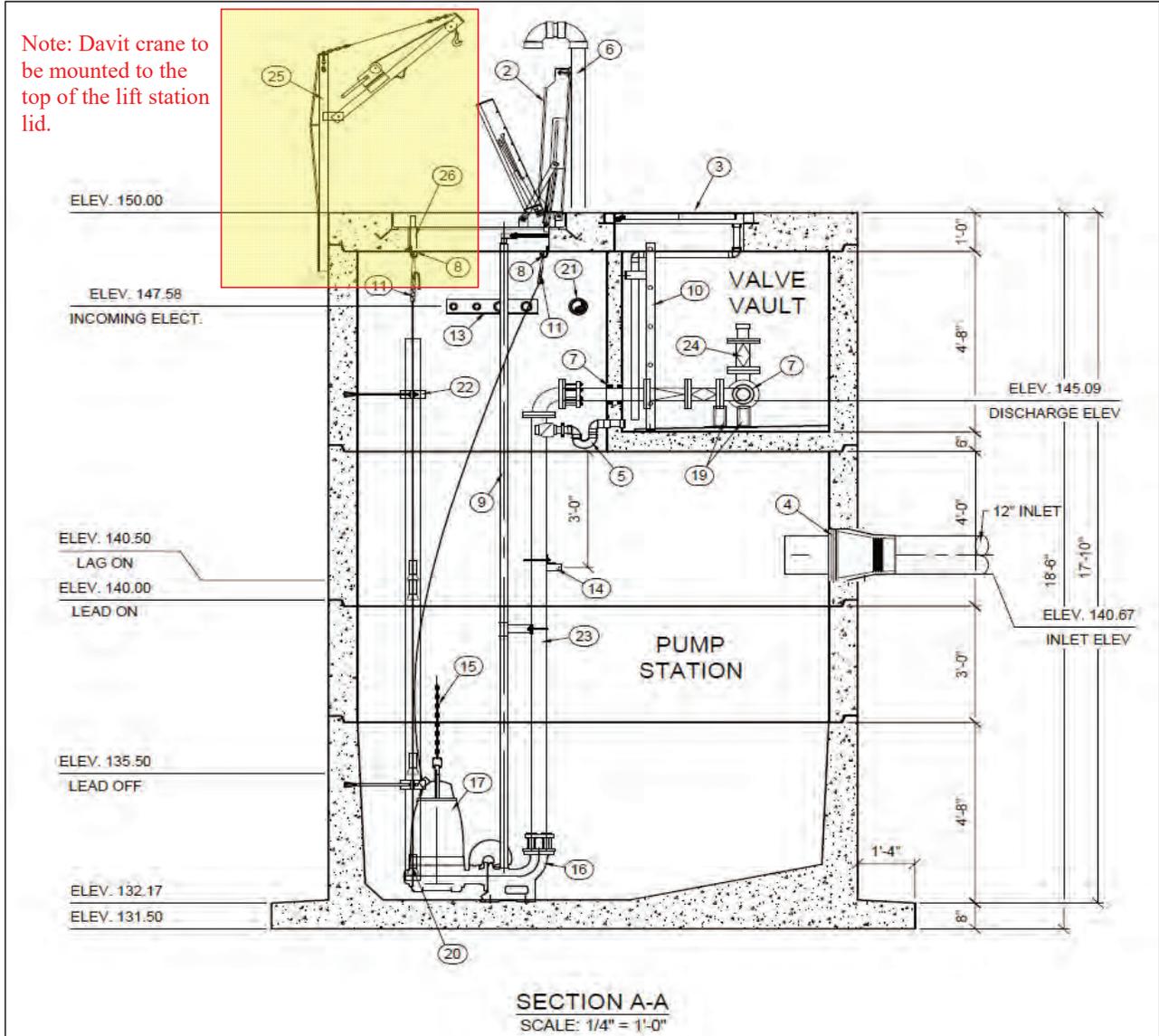


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From [Plans]:

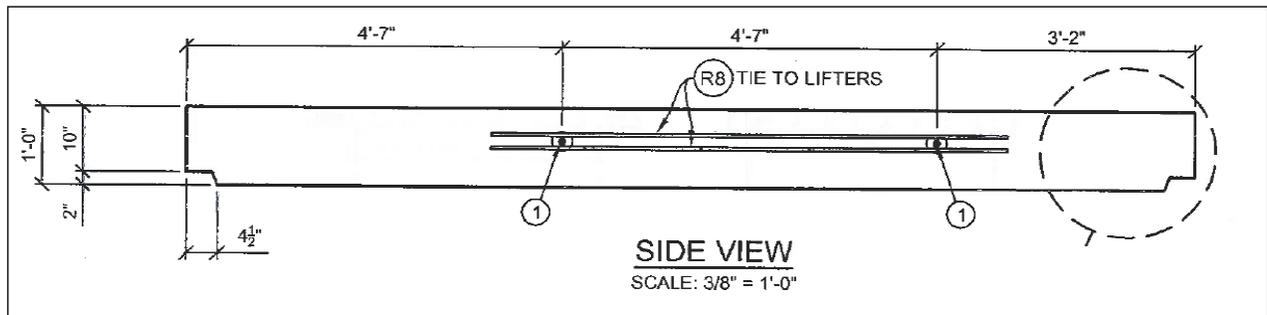
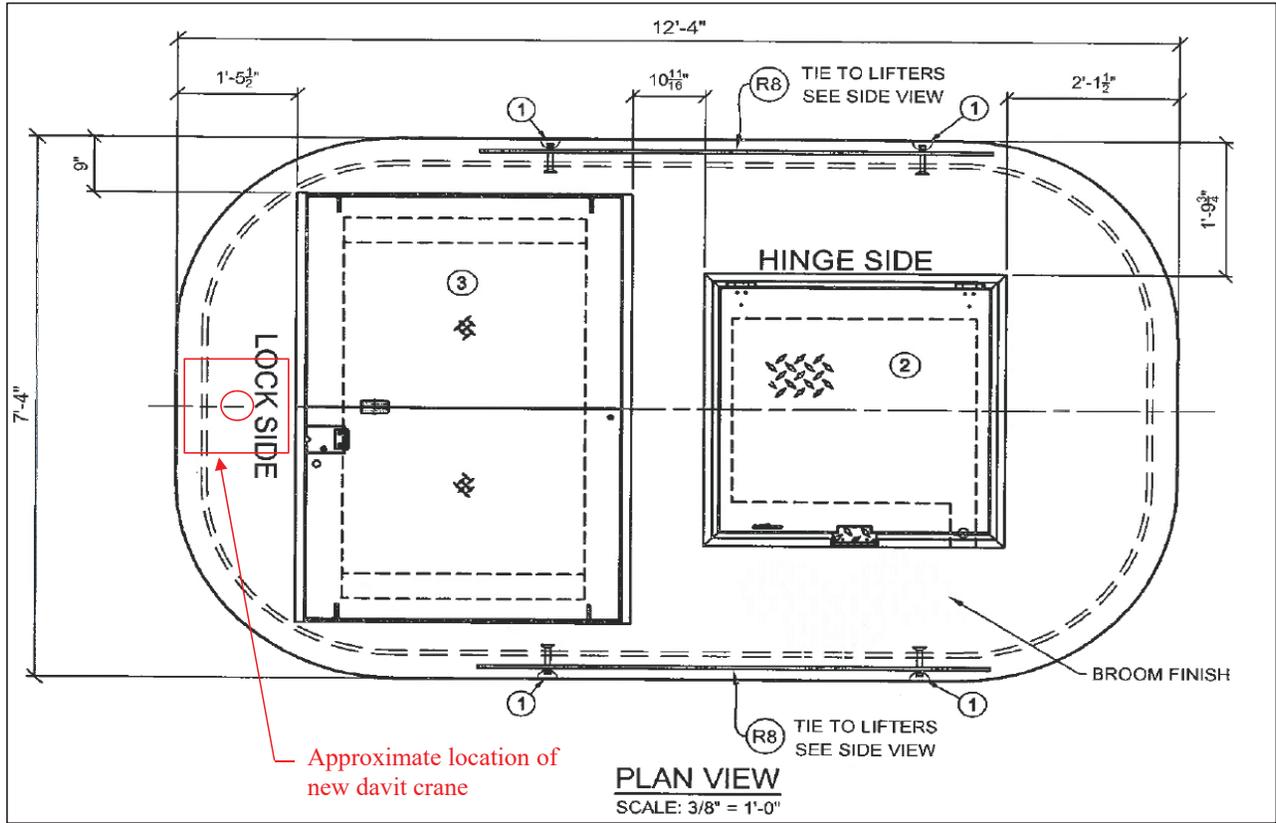
Note: Davit crane to be mounted to the top of the lift station lid.



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From [Shop Dwg]:



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[D] Design Data

From [Plans]:

DESIGN DATA:

DESIGN LOAD:	ACI 350	
TRAFFIC LOADING:		H20
FILL HEIGHT:		0 FT
WATER TABLE:		AT GRADE
WET LATERAL EARTH PRESSURE (EFP):		93 PCF
LATERAL LIVE LOAD SURCHARGE:		120 PSF
LATERAL SEISMIC PRESSURE:		36 PCF
SPECIAL ONE LIFT DESIGN:		27'-8" MAX
MATERIALS:		
CEMENT:		ASTM C150
CONCRETE BASE:		F'C = 7,000 PSI @ 28 DAYS - WITH DP400 MASTER LIFE
REBAR:		ASTM A-615 GRADE 60
FINISH:		
EXTERIOR:		CM 7007
INTERIOR (VALVE VAULT):		BARE CONCRETE
INTERIOR (WET WELL):		BARE CONCRETE
SEALANT:	HORIZONTAL JOINTS:	(2) CONTINUOUS ROWS OF CONSEAL CS102



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[E] Design Force

The anchorage will be designed based on the capacity of the davit crane (1200 lb) with a impact factor of 1.25 and a live load factor of 1.6. The anchorage design will consider an envelope of all possible locations of the load.

Design Load = $1.25 * 1.6 * (1,200 \text{ lb}) = 2,400 \text{ lb}$

Distance to Load = 66"



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Project:	<u>City of Bainbridge - RC611 Pump Station</u>	Date:	<u>7/2/2019</u>
Subject:	<u>Thern Commander Davit Crane 5PT10 (1200 lb Capacity)</u>	By:	<u>CMR</u>
Subject:	<u>Anchorage Design</u>	Page:	<u>8 of 12</u>

[F] Nonstructural Component Anchorage Design in Concrete

The design of anchors in concrete shall be per [ACI 318 Chapter 17]. Hilti Profis 2.8.3. software will be used to design the anchorage. A design summary report is included below. See the [Appendix] for the complete Hilti Profis Report and additional anchor product information.

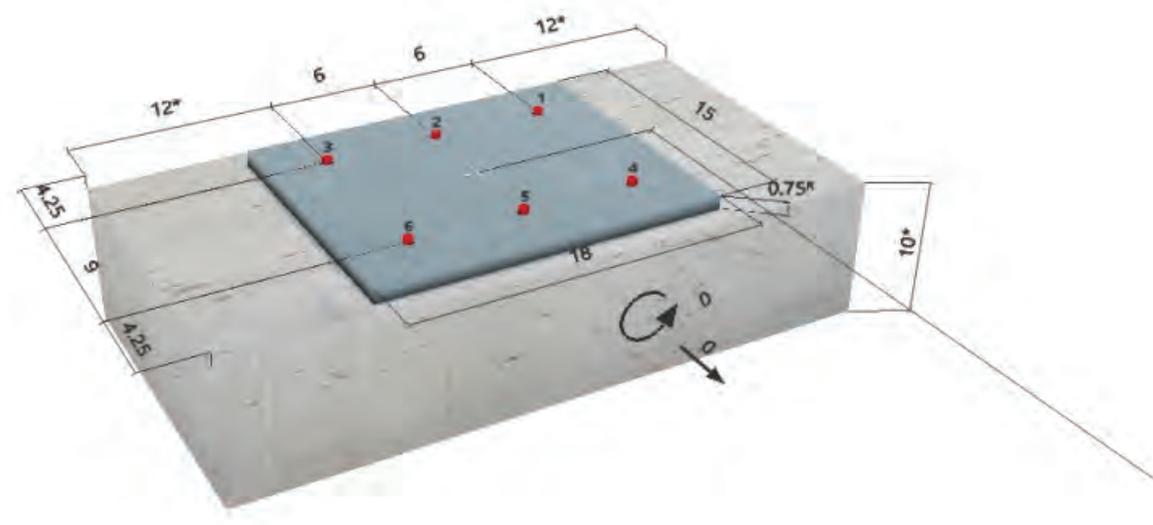
Check (6) 1/2" dia ASTM F593 Type 316 SST threaded rods with Hilti HIT-RE 500 V3, and ASTM F594 Group 2 Type 316 SST nuts and washers, with a min embedment of 8 1/2" into the vault slab. Use a minimum edge distance as shown below.

1 Input data

Anchor type and diameter:	HIT-RE 500 V3 + HAS-R 316 SS 1/2	
Effective embedment depth:	$h_{ef,act} = 8.500$ in. ($h_{ef,lim} = -$ in.)	
Material:	ASTM F 593	
Evaluation Service Report:	ESR-3814	
Issued Valid:	1/1/2019 1/1/2021	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.	
Anchor plate:	$l_x \times l_y \times t = 15.000$ in. \times 18.000 in. \times 0.750 in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 7000 , $f_c' = 7,000$ psi; $h = 10.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]





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Project:	City of Bainbridge - RC611 Pump Station	Date:	7/2/2019
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Case 1 Governs:

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	4,096	9,223	45	OK
Bond Strength**	13,498	14,050	97	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Strength**	13,498	14,105	96	OK

* anchor having the highest loading **anchor group (anchors in tension)

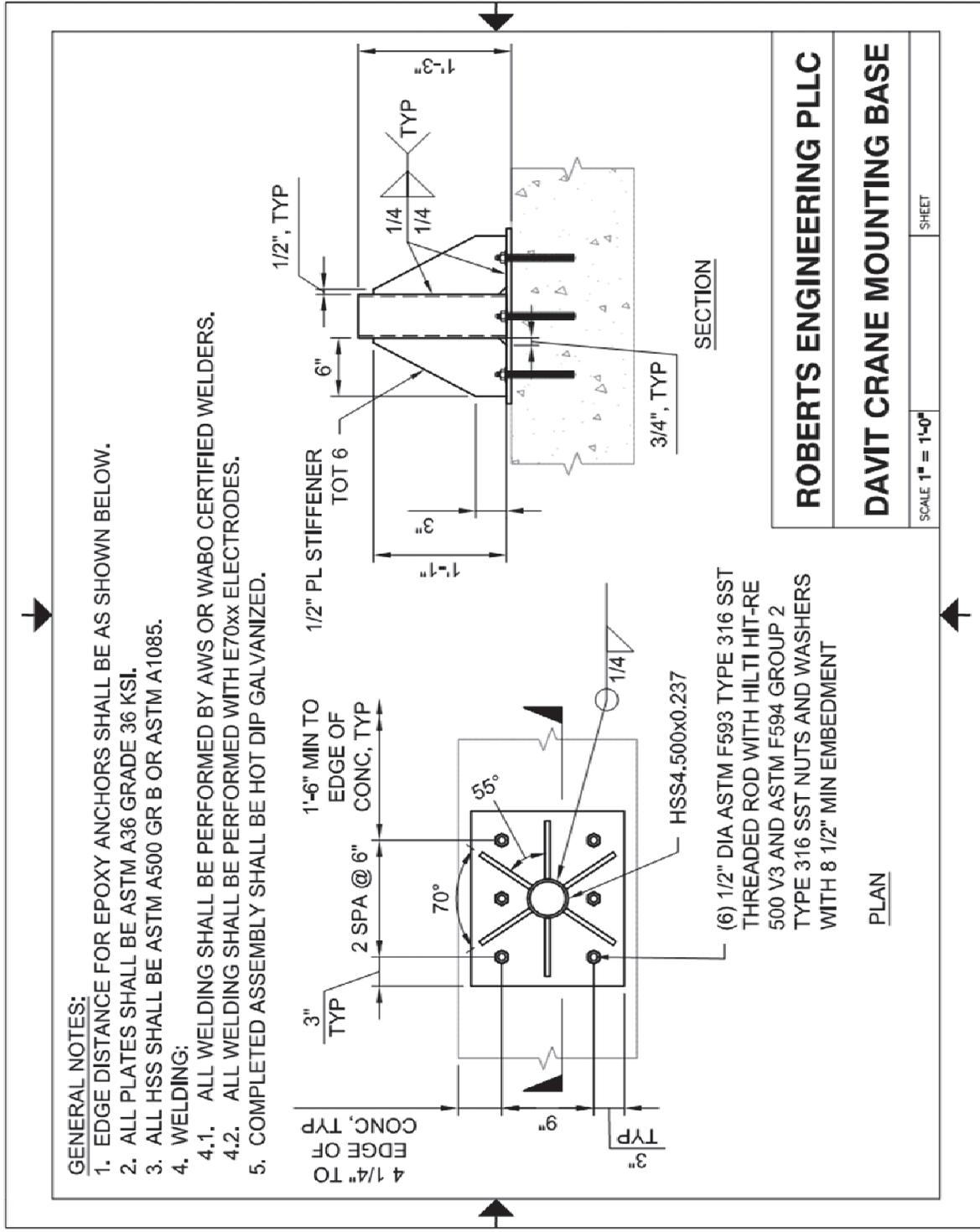
Fastening meets the design criteria!

Use (6) 1/2" dia ASTM F593 Type 316 SST threaded rods with Hilti HIT-RE 500 V3, and ASTM F594 Group 2 Type 316 SST nuts and washers, with a min embedment of 8 1/2" into the vault slab. See Appendix for complete Profis 2 analysis results.



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Project:	<u>City of Bainbridge - RC611 Pump Station</u>	Date:	<u>7/2/2019</u>
Subject:	<u>Thern Commander Davit Crane 5PT10 (1200 lb Capacity)</u>	By:	<u>CMR</u>
Subject:	<u>Anchorage Design</u>	Page:	<u>10 of 12</u>

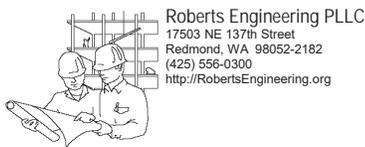


ROBERTS ENGINEERING PLLC

DAVIT CRANE MOUNTING BASE

SCALE 1" = 1'-0"

SHEET



Project:	City of Bainbridge - RC611 Pump Station	Date:	7/2/2019
Subject:	Thern Commander Davit Crane 5PT10 (1200 lb Capacity)	By:	CMR
Subject:	Anchorage Design	Page:	11 of 12

Appendix

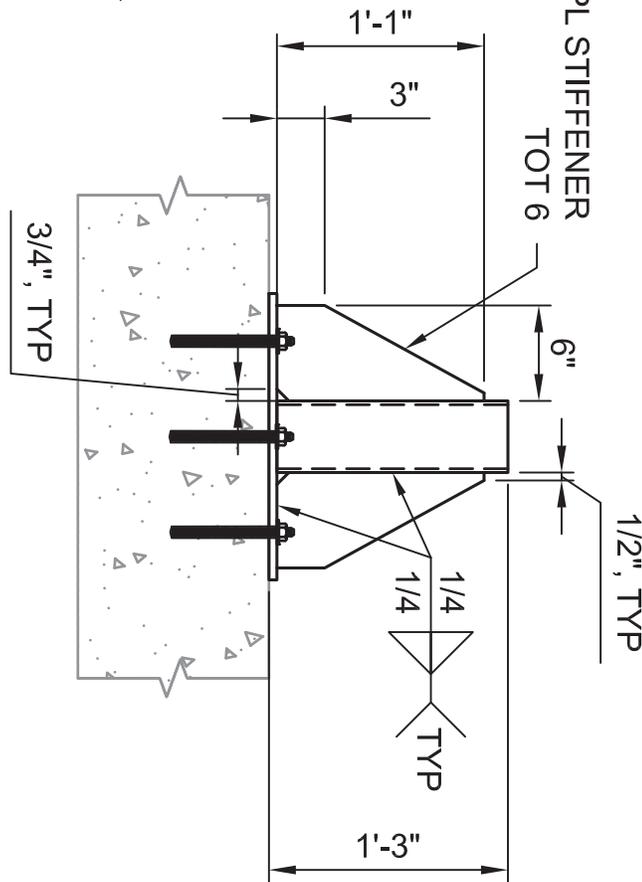
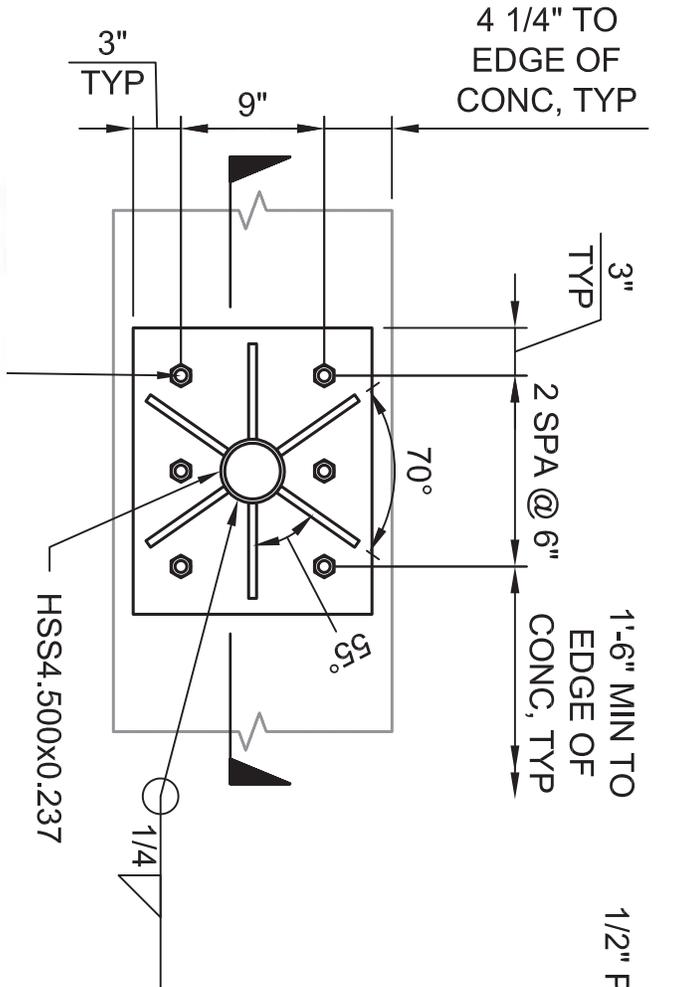
1. Pedestal Base Anchorage Details
2. Information Package from WECI
3. Hilti Profis Analysis Results
4. Hilti Product Data and Installation Instructions



Roberts Engineering PLLC
17503 NE 137th Street
Redmond, WA 98052-2182
(425) 556-0300
<http://RobertsEngineering.org>

Project:	<u>City of Bainbridge - RC611 Pump Station</u>	Date:	<u>7/2/2019</u>
Subject:	<u>Thern Commander Davit Crane 5PT10 (1200 lb Capacity)</u>	By:	<u>CMR</u>
Subject:	<u>Anchorage Design</u>	Page:	<u>12 of 12</u>

- GENERAL NOTES:**
1. EDGE DISTANCE FOR EPOXY ANCHORS SHALL BE AS SHOWN BELOW.
 2. ALL PLATES SHALL BE ASTM A36 GRADE 36 KSI.
 3. ALL HSS SHALL BE ASTM A500 GR B OR ASTM A1085.
 4. WELDING:
 - 4.1. ALL WELDING SHALL BE PERFORMED BY AWS OR WABO CERTIFIED WELDERS.
 - 4.2. ALL WELDING SHALL BE PERFORMED WITH E70XX ELECTRODES.
 5. COMPLETED ASSEMBLY SHALL BE HOT DIP GALVANIZED.



- (6) 1/2" DIA ASTM F593 TYPE 316 SST THREADED ROD WITH HILTI HIT-RE 500 V3 AND ASTM F594 GROUP 2 TYPE 316 SST NUTS AND WASHERS WITH 8 1/2" MIN EMBEDMENT



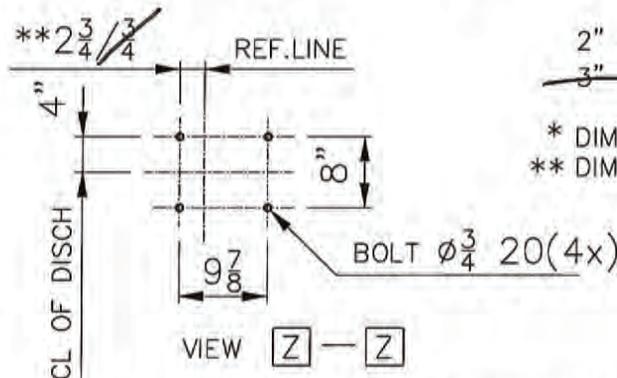
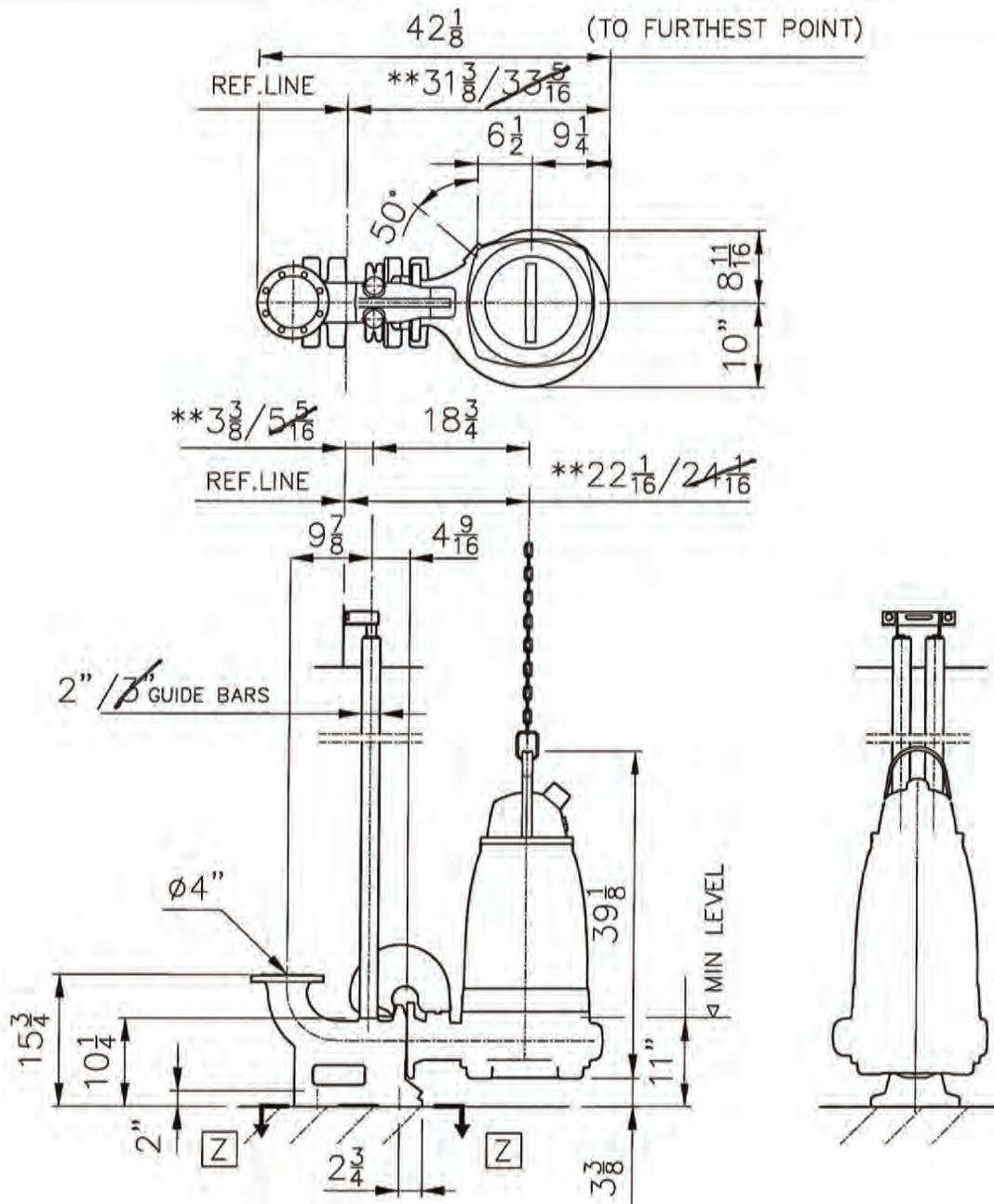
PLAN

SECTION

ROBERTS ENGINEERING PLLC
DAVIT CRANE MOUNTING BASE

SCALE 1" = 1'-0"

SHEET



2" guidebars for a new installation
~~3" guidebars for retrofit~~

* DIMENSION TO ENDS OF GUIDE BARS
 ** DIM. FOR 2" / 3" GUIDE BARS

NP,FP 3171.091, 095, 181, 185, 350, 390 HT

Weight (lbs)	Pump	Discharge
with cooling jacket	665	95
without cooling jacket	600	95

	Denomination	Drawn by	Checked by	Date
	Dimensional drwg	IW	CJS	140813
	NP, FP 3171.091,095,181,185,350,390 HT	Scale	1:1	Reg no
			6599600	11

5PT10 / 5PT20

COMMANDER SERIES

Like a favorite tool in your toolbox, Thern Commander Series portable davit cranes are ideal for many applications. Their sturdy design makes them both affordable and easy-to-use.



1200 lb and (544 / 907 kg)

2000 lb Capacity Portable Davit Cranes

- Portable
- Rugged and affordable
- Quick-Mount Winch Bracket
- Roller Bearing for Easy 360° Rotation
- Manual or Power Winch Operation
- Five Corrosion-Resistant Finishes
- Easy, No-Tools Assembly/Disassembly
- Variety of Bases
- 2-Year Warranty



Model 5PT10-M1
Base 5BP10



HAND / POWER / HYDRAULIC / AIR WINCHES • DAVIT CRANES
Winona, MN USA | www.thern.com

COMMANDER SERIES

COMMANDER 1000

NEW FEATURES

CLEVIS PIN

The sheave clevis pin is now D-Shaped to prevent the clevis pin from roating when under light loads.

QUICK-MOUNT WINCH BRACKET

A variety of Thern winches can be attached to the bracket. After a winch is attached to the bracket, the bracket is easily mounted (without tools) to the crane via quick-connect pins.

AUXILIARY ATTACHMENT HOLE

Allows for various load attachments or two part line configurations.

MAST CAP

A cap (not visible) on top of the mast helps keep weather and debris out of the mast.

ROTATION HANDLE

The new rotation handle position does not interfere with the operation of the boom angle adjustment screw jack.

BASE EXTENSION

The optional base extension is ideal for use with the flush mount or wall mount base options to maintain crane height for obstacle clearance or when additional 15" (381 mm) height is required.

BASE CAP

Base cap with lanyard, keeps water and debris out when crane is removed.

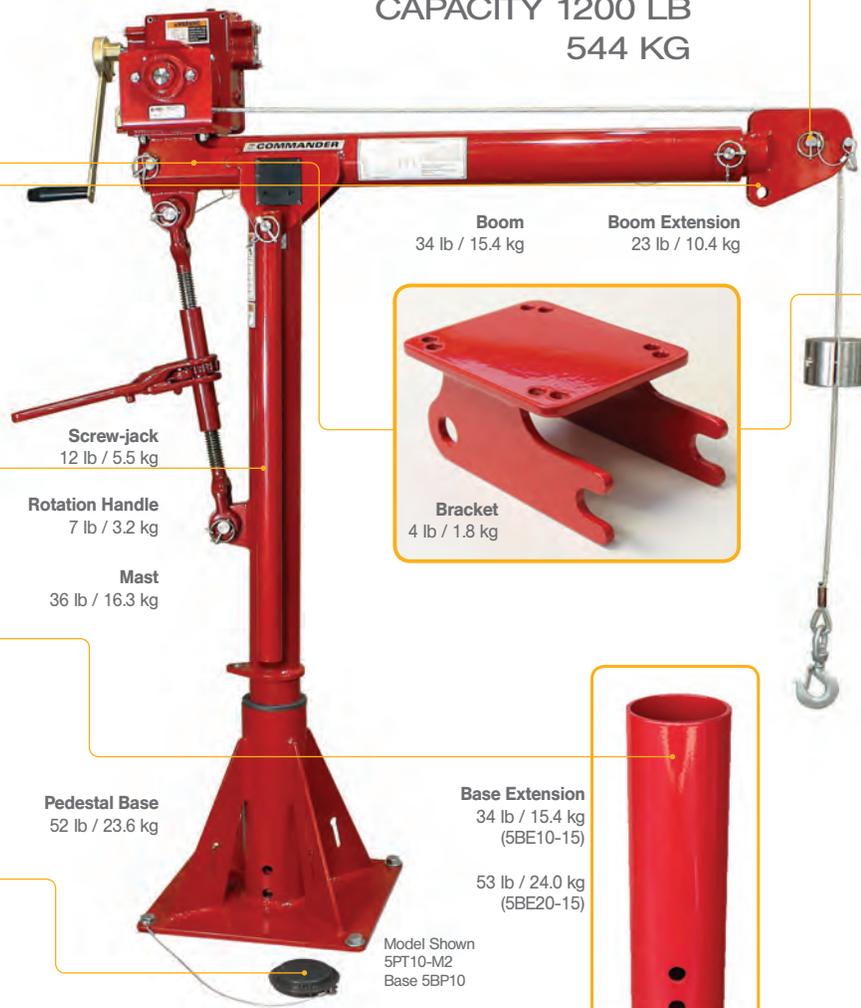
ROLLER/BALL BEARING

Optional on the Commander Series Davits, the specially designed roller/ball bearing at top of base requires no tools for installation. The roller/ball bearing allows smooth and easy 360° crane rotation under load.

STAINLESS STEEL LOCK

Stainless steel lock assembly keeps crane in position during winch operation and when not in use. Included with roller/ball bearing.

SERIES 5PT10
CAPACITY 1200 LB
544 KG



Boom
34 lb / 15.4 kg

Boom Extension
23 lb / 10.4 kg



Screw-jack
12 lb / 5.5 kg

Rotation Handle
7 lb / 3.2 kg

Mast
36 lb / 16.3 kg

Pedestal Base
52 lb / 23.6 kg

Base Extension
34 lb / 15.4 kg
(5BE10-15)

53 lb / 24.0 kg
(5BE20-15)

Model Shown
5PT10-M2
Base 5BP10

Bearing
9 lb / 4.1 kg (5PT10BRG)
11 lb / 5.0 kg (5PT20BRG)



Thern products are not for lifting people or things over people.

CRANES AND WINCHES

COMMANDER SERIES

FINISHES

Crane Finishes for Commander Series

All cranes come standard with Electrostatic Powder Coat red finish. Four optional finishes also offered are Galvanized, 304 or 316 Stainless Steel, and corrosion-resistant Epoxy. Custom colors are available per customer request - Please contact factory.



powder coat



galvanized



3 part epoxy



304 stainless steel



316 stainless steel

Finish	Code	Model Number		Options	Description
		CMDR 1000	CMDR 2000		
Powder Coat (Red)	-	5PT10	5PT20	Standard N/C	Red electrostatic powder coating applied to all cranes - Good
Galvanized	G	5PT10G	5PT20G	Optional/Extra	An economical choice that provides extra protection - Better
Epoxy (Gray)	X	5PT10X	5PT20X	Optional/Extra	3-part epoxy is impact, fire, water, and slip-resistant - Best
304 Stainless Steel	S	5PT10S	5PT20S	Optional/Extra	Electro-polished for added protection - Premium
316 Stainless Steel	S316	5PT10S316	5PT20S316	Optional/Extra	A higher level of corrosion protection - Ultimate

WINCHES

For Commander Series



Hand Winches

Winch	Winch Model No.	Description	Finish	Approx. Ship Weight
M1	M4312PB-K	Spur gear hand winch with brake	Zinc Plated	27 lbs 13 kg
M2	4WM2-K	Worm gear hand winch with brake	Red Enamel	42 lbs 19.1 kg
M2X	4WM2EGRA-K	Worm gear hand winch with brake	Epoxy Paint (Gray)	42 lbs 19.1 kg
M3	M4312PBSS-K	Stainless steel spur gear hand winch with brake	Stainless Steel	27 lbs 13 kg

All hand winches include disc brake for load control and steel gear covers to protect gears and help prevent injuries. NOTE: Worm gear requires more turns with less effort than a spur gear winch.

Electric Winches

Electric Winch	Model No.	Line Speed		Finish	Power	Control (Pendant)	Approx. Ship Weight	
		1st Layer	Full Drum					
E2	4WP2-K	8 fpm	13 fpm	Enamel Paint	115 Volt, AC, Single Phase	6 ft	85 lbs	39 kg
E2X	4WP2EGRA-K	8 fpm	13 fpm	Epoxy Paint	115 Volt, AC, Single Phase	6 ft	85 lbs	39 kg
E4	4777-K	13 fpm	22 fpm	Enamel Paint	115 Volt, AC Single Phase	6 ft	110 lbs	50 kg
E4X	4777EGRA-K	13 fpm	22 fpm	Epoxy Paint	115 Volt, AC Single Phase	6 ft	110 lbs	50 kg
E4DC	4777DC-K	13 fpm	22 fpm	Enamel Paint	12 Volt, DC	10 ft	124 lbs	57 kg
E4XDC	4777DCEGRA-K	13 fpm	22 fpm	Epoxy Paint	12 Volt, DC	10 ft	124 lbs	57 kg



All electric winches mount on boom via quick mount bracket and are equipped with internal break for load control.

BASES AND WIRE ROPE

COMMANDER SERIES

BASES (sold separately) For Commander Series

Select the appropriate base(s) for your application from the chart below. Matching your crane with multiple bases provides optimal worksite flexibility and an economical solution for servicing multiple lift stations.



Finish	Pedestal		Flush		Wall		Wheel		Extension*	
	5PT10	5PT20	5PT10	5PT20	5PT10	5PT20	5PT10	5PT20	5PT10	5PT20
Powder Coat Paint	5BP10	5BP20	5BF10	5BF20	5BW10	5BW20	5BR10	5BR20	5BE10-15	5BE20-15
Galvanized	5BP10G	5BP20G	5BF10G	5BF20G	5BW10G	5BW20G	-	-	5BE10-15G	5BE20-15G
304 Stainless Steel	5BP10S	5BP20S	5BF10S	5BF20S	5BW10S	5BW20S	-	-	5BE10-15S	5BE20-15S
316 Stainless Steel	5BP10S316	5BP20S316	5BF10S316	5BF20S316	5BW10S316	5BW20S316	-	-	5BE10-15S316	5BE20-15S316
Epoxy Paint	5BP10X	5BP20X	5BF10X	5BF20X	5BW10X	5BW20X	5BR10X	5BR20X	5BE10-15X	5BE20-15X
Approximate Ship Weight	56 lbs (25.4 kg)	71 lbs (32.2 kg)	47 lbs (21.3 kg)	62 lbs (28.1 kg)	52 lbs (23.6 kg)	72 lbs (32.7 kg)	238 lbs (108.0 kg)	351 lbs (159.2 kg)	33 lbs (14.9 kg)	53 lbs (24.0 kg)

*Ideal for use with flush or wall mount bases to retain crane mast height. (Use with other bases where additional height is needed.)

WIRE ROPE Assembly (sold separately) For Commander Series



Wire Rope Length	Galvanized Aircraft Cable		304 Stainless Steel Rope		316 Stainless Steel Rope	
	3/16" (5mm) Diameter	1/4" (6mm) Diameter	3/16" (5mm) Diameter	1/4" (6mm) Diameter	3/16" (5mm) Diameter	1/4" (6mm) Diameter
Wire Rope Ratings*	1200 lbs (544 kg)	2000 lbs (907 kg)	1000 lbs (454 kg)	1800 lbs (816 kg)	800 lbs (363 kg)	1400 lbs (635 kg)
20 ft - 6 m	WA19-20NS	WA25-20NS	WS19-20NS	WS25-20NS	WSS19-20NS	WSS25-20NS
28 ft - 8.5 m	WA19-28NS	WA25-28NS	WS19-28NS	WS25-28NS	WSS19-28NS	WSS25-28NS
36 ft - 10.9 m	WA19-36NS	WA25-36NS	WS19-36NS	WS25-36NS	WSS19-36NS	WSS25-36NS
45 ft - 13.7 m	WA19-45NS	WA25-45NS	WS19-45NS	WS25-45NS	WSS19-45NS	WSS25-45NS
60 ft - 18.2 m	WA19-60NS	WA25-60NS	WS19-60NS	WS25-60NS	WSS19-60NS	WSS25-60NS
75 ft - 22.8 m	WA19-75NS	WA25-75NS	WS19-75NS	WS25-75NS	WSS19-75NS	WSS25-75NS
90 ft - 27.4 m	WA19-90NS	-	WS19-90NS	-	WSS19-90NS	-

These winches and cranes are sold without wire rope. However, we carry top quality wire rope assemblies optimally designed for use with our winches and cranes. The assemblies above are equipped with a swaged ball fitting and swivel hook (Enamel w/Galvanized rope or Stainless Steel with SS rope)

*Based on 3.5:1 design factor

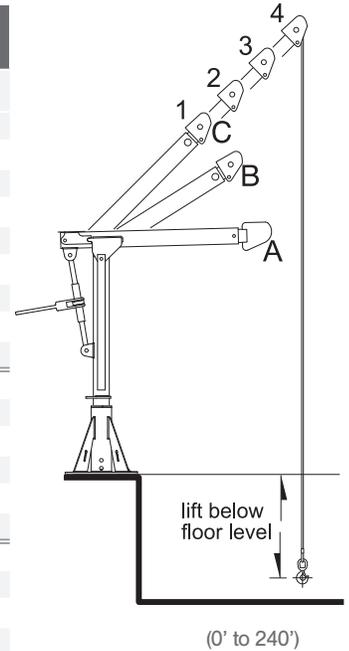
NOTE: 1/8" (3mm) wire rope is available with a reduced load rating. Please contact the factory.

PERFORMANCE

COMMANDER

1000

Commander 1000 Lift Below Floor² Level

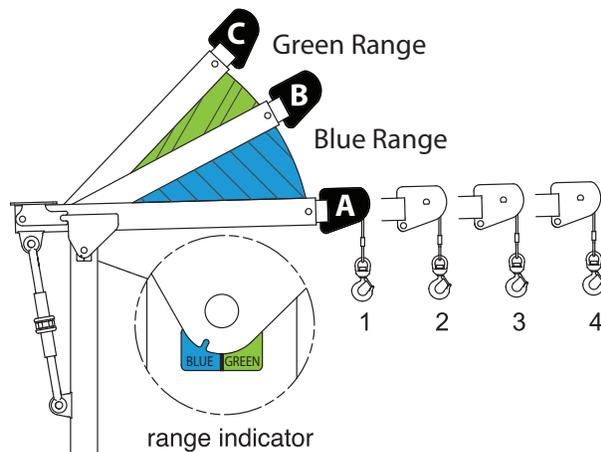


Lift Below Floor ¹				Wire Rope Diameter		Wire Rope Length ³		Winch Configurations				
Minimum (C4)		Maximum (C1)						M1	M2	M3	E2	E4
(ft)	(m)	(ft)	(m)	(in)	(mm)	(ft)	(m)					
2	0.6	7	2.1	3/16	5	20	6.0	x	-	x	-	x
10	3.0	15	4.5	3/16	5	28	8.5	x	-	x	-	x
18	5.4	23	7.0	3/16	5	36	10.9	x	-	x	-	x
27	8.2	32	9.7	3/16	5	45	13.7	x	-	x	-	x
42	12.8	47	14.3	3/16	5	60	18.2	x	-	x	-	x
57	17.3	62	18.8	3/16	5	75	22.8	x	-	x	-	x
72	21.9	77	23.4	3/16	5	90	27.4	x	-	x	-	x
For long lifts (Up to 240' (73 m)) please contact factory												
2	0.6	7	2.1	1/4	6	20	6.0	x	x	x	x	x
10	3.0	15	4.5	1/4	6	28	8.5	x	x	x	x	x
18	5.4	23	7.0	1/4	6	36	10.9	x	x	x	x	x
27	8.2	32	9.7	1/4	6	45	13.7	x	x	x	x	x
42	12.8	47	14.3	1/4	6	60	18.2	x	x	x	x	x
57	17.3	62	18.8	1/4	6	75	22.8	-	x	-	x	x
2	0.6	7	2.1	5/16	8	20	6.0	-	-	-	-	x
10	3.0	15	4.5	5/16	8	28	8.5	-	-	-	-	x
18	5.4	23	7.0	5/16	8	36	10.9	-	-	-	-	x
27	8.2	32	9.7	5/16	8	45	13.7	-	-	-	-	x
42	12.8	47	14.3	5/16	8	60	18.2	-	-	-	-	x

¹ Lift below floor level varies depending on boom position and base configuration. For long lifts (Up to 240 ft (73 m)), please contact factory.
² Performance Characteristics are for standard products referred to in this manual. Non-standard products may vary from the original design. Contact Them, Inc. for this information.
³ Wire rope assemblies include a hook and a swaged ball fitting to work with quick disconnect anchor on winches and 316SS wire rope is also available. Please contact the factory.

Commander 1000 Performance Ratings²

	Boom Position	Load Rating	
		(lb)	(kg)
BLUE RANGE	A-1	1000	453
	A-2	800	362
	A-3	650	294
	A-4	550	249
GREEN RANGE	B-1	1200	544
	B-2	950	430
	B-3	750	340
	B-4	650	294
	C-1	1200	544
	C-2	950	430
	C-3	750	340
	C-4	650	294



Them products are not for lifting people, or things over people.

IMPORTANT:

It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

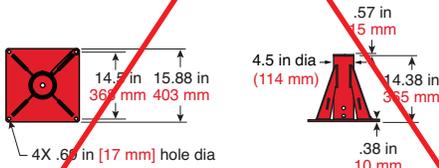
PERFORMANCE

COMMANDER 1000

Commander 1000 On Pedestal Base Reach & Height Above Floor

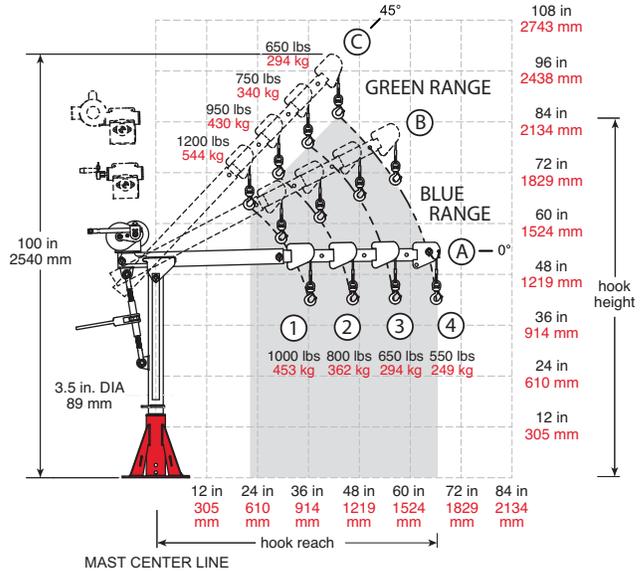
Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A-1	36	914	42	1066
A-2	46	1168	42	1066
A-3	56	1422	42	1066
A-4	66	1676	42	1066
<hr/>				
B-1	29	736	56	1422
B-2	38	965	60	1524
B-3	47	1193	65	1651
B-4	56	1422	69	1752
<hr/>				
C-1	22	558	64	1625
C-2	29	736	71	1803
C-3	36	914	78	1981
C-4	43	1092	85	2159

Dimensions are for reference only and subject to change without notice.



Commander 1000 Pedestal Base 5BP10

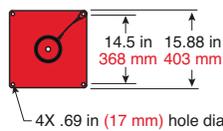
- 5BP10 5BP10S 5BP10X
- 5BP10G 5BP10S316



Commander 1000 On Flush or Wall-Mount Base - Reach & Height Above Floor

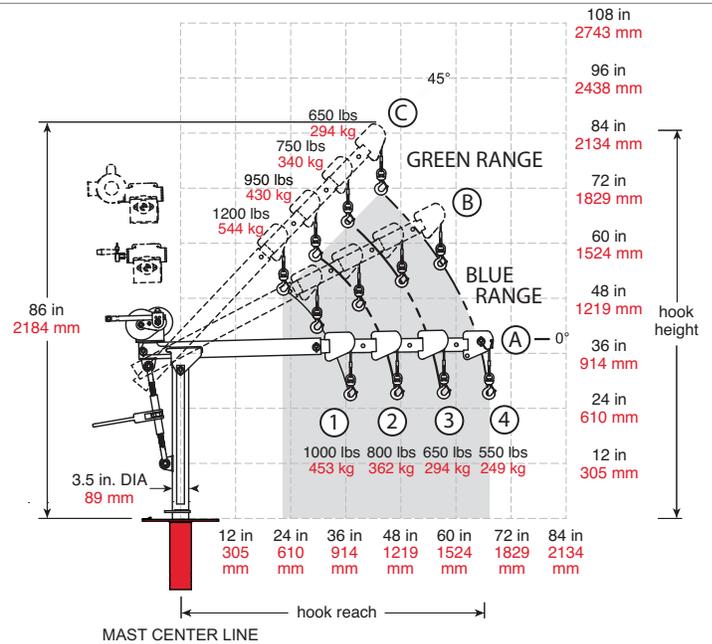
Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A-1	36	914	28	711
A-2	46	1168	28	711
A-3	56	1422	28	711
A-4	66	1676	28	711
<hr/>				
B-1	29	736	42	1066
B-2	38	965	46	1168
B-3	47	1193	51	1295
B-4	56	1422	55	1397
<hr/>				
C-1	22	558	50	1270
C-2	29	736	57	1447
C-3	36	914	64	1625
C-4	43	1092	71	1803

Dimensions are for reference only and subject to change without notice.



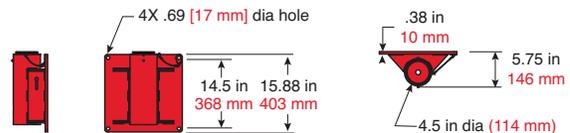
Commander 1000 Flush Base 5BF10

- 5BF10
- 5BF10G
- 5BF10S
- 5BF10S316
- 5BF10X



Commander 1000 Wall-Mount Base 5BW10

- 5BW10
- 5BW10G
- 5BW10S
- 5BW10S316
- 5BW10X



IMPORTANT:

It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.



Subject: Letter of Compliance

Product: 611 precast concrete vault pump station

Project: Bainbridge Island

Customer: Whitney Equipment

Date: 10/7/19

This document asserts that the 5PT10 crane can be mounted on the top slab of the 611 vault. The slab can withstand the self-weight of the crane and the 1200lb lifting capacity. I reviewed the calculations by Roberts Engineering and approve the mounting method.

Frank Stewart, P.E.
Engineering Manager



CONCRETE LIFT PUMP STATION

REV	DESCRIPTION	BY	DATE
0	PRODUCTION RELEASE	RDW	3/22/18
1	CUSTOMER COMMENTS	RDW	5/29/18
2	PRODUCTION RELEASE	RDW	5/30/18
3	INLET ADJUSTMENTS	ME	08/27/18
4	INLET ADJUSTMENTS	RDW	08/28/18
5	INLET NOTE	RDW	08/27/18

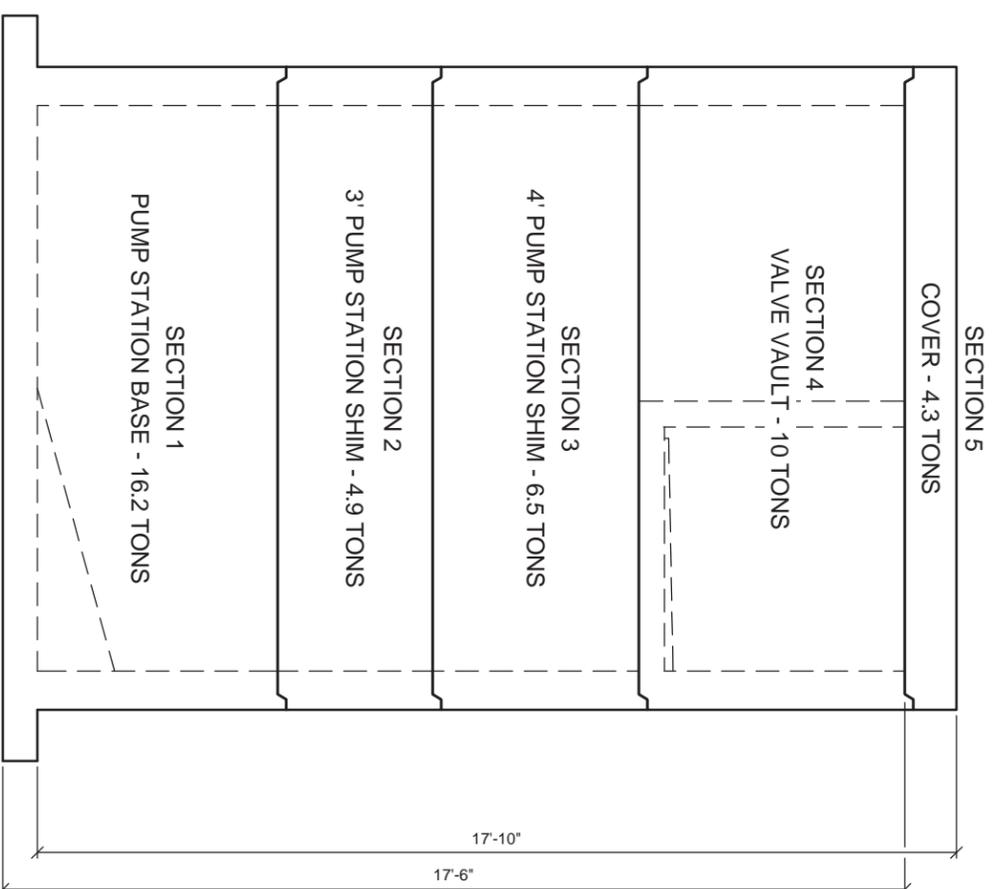
DESIGN DATA:

DESIGN LOAD:	ACI 350	H20
TRAFFIC LOADING:		0 FT
FILL HEIGHT:		AT GRADE
WATER TABLE:		93 PCF
WET LATERAL EARTH PRESSURE (EFP):		120 PSF
LATERAL LIVE LOAD SURCHARGE:		36 PCF
LATERAL SEISMIC PRESSURE:		27'-9" MAX
SPECIAL ONE LIFT DESIGN:		
MATERIALS:	CEMENT:	ASTM C150
	CONCRETE BASE:	FC = 7,000 PSI @ 28 DAYS - WITH DP400 MASTER LIFE
	REBAR:	ASTM A-615 GRADE 60
FINISH:	EXTERIOR:	CM 7007
	INTERIOR (VALVE VAULT):	BARE CONCRETE
	INTERIOR (WET WELL):	BARE CONCRETE
SEALANT:	HORIZONTAL JOINTS:	(2) CONTINUOUS ROWS OF CONSEAL CS102

Index:

18-98008-1:	COVER / GENERAL NOTES
18-98008-2:	STATION LAYOUT
18-98008-3:	PIPING LAYOUT
18-98008-4:	DETAILS
18-98008-5:	DETAILS
18-98008-6:	CORING DETAILS

NOTE: 1.) EACH JOINT SHALL HAVE (2) ROWS OF CONSEAL CS102 CONTINUOUS AROUND ENTIRE PERIMETER.
2.) CONTRACTOR TO VERIFY ALL HOLES & LOCATIONS



VOLUME 62.56 CF/FT
= 468 GAL/FT



411E Pine Island Drive, AZ 85225
PHONE: 480-858-2118 FAX: 480-858-2108

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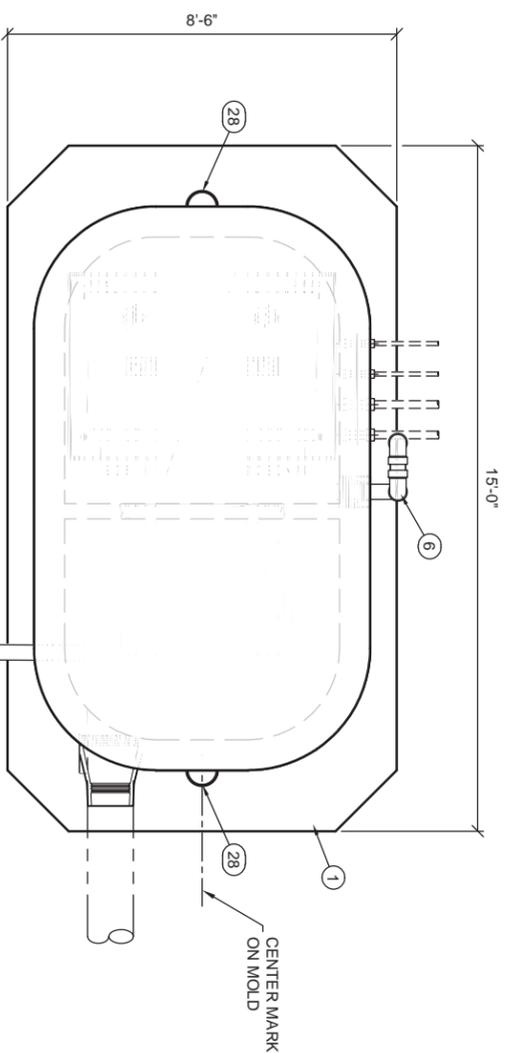
RC611 PUMP STATION (17'-10")

COVER / GENERAL NOTES
VILLAGE PUMP STATION
CITY OF BANBRIDGE ISLAND, WA

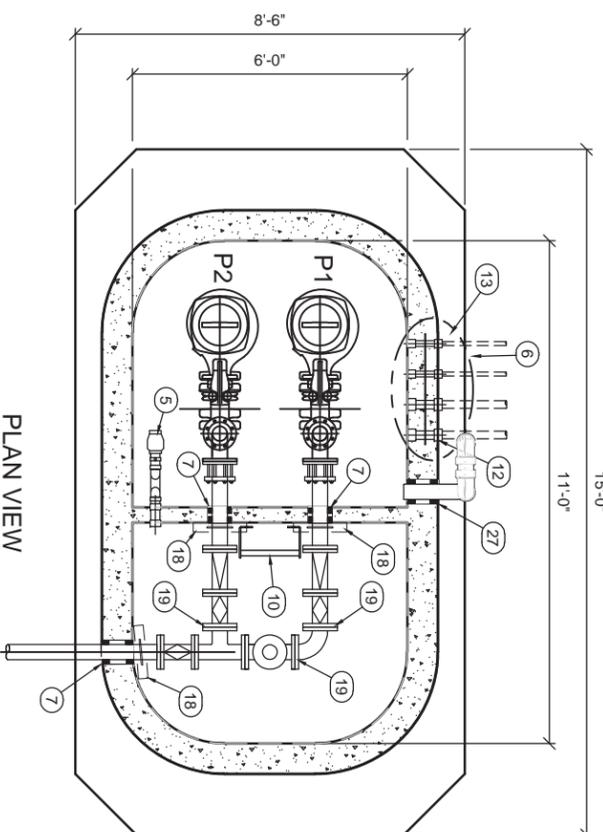
APPROVED FOR FABRICATION

BY: _____ DATE: _____

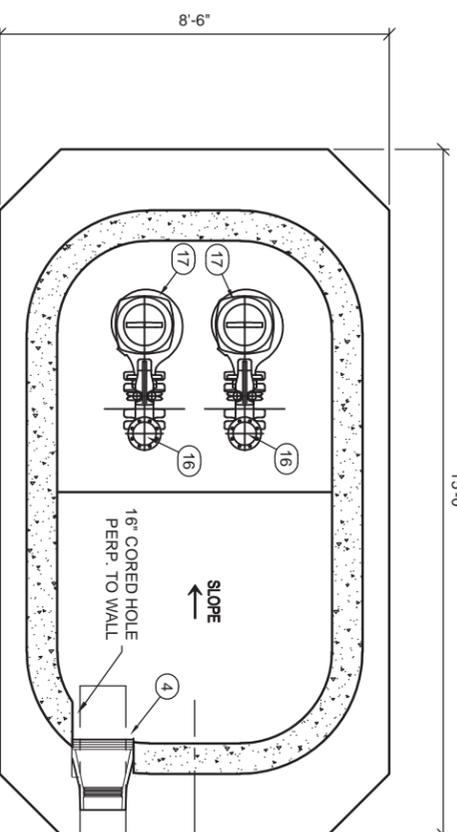
CUSTOMER		WHITNEY EQUIPMENT	
DATE	DRAWN	ENGINEER	DATE
3/22/18	RDW		
DRAWING NUMBER	REVISION	SHEET	SALES ORDER
RC611X1710.dwg	5	1 OF 6	



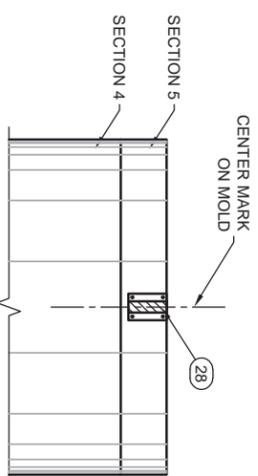
PLAN VIEW
SCALE: 1/4" = 1'-0"



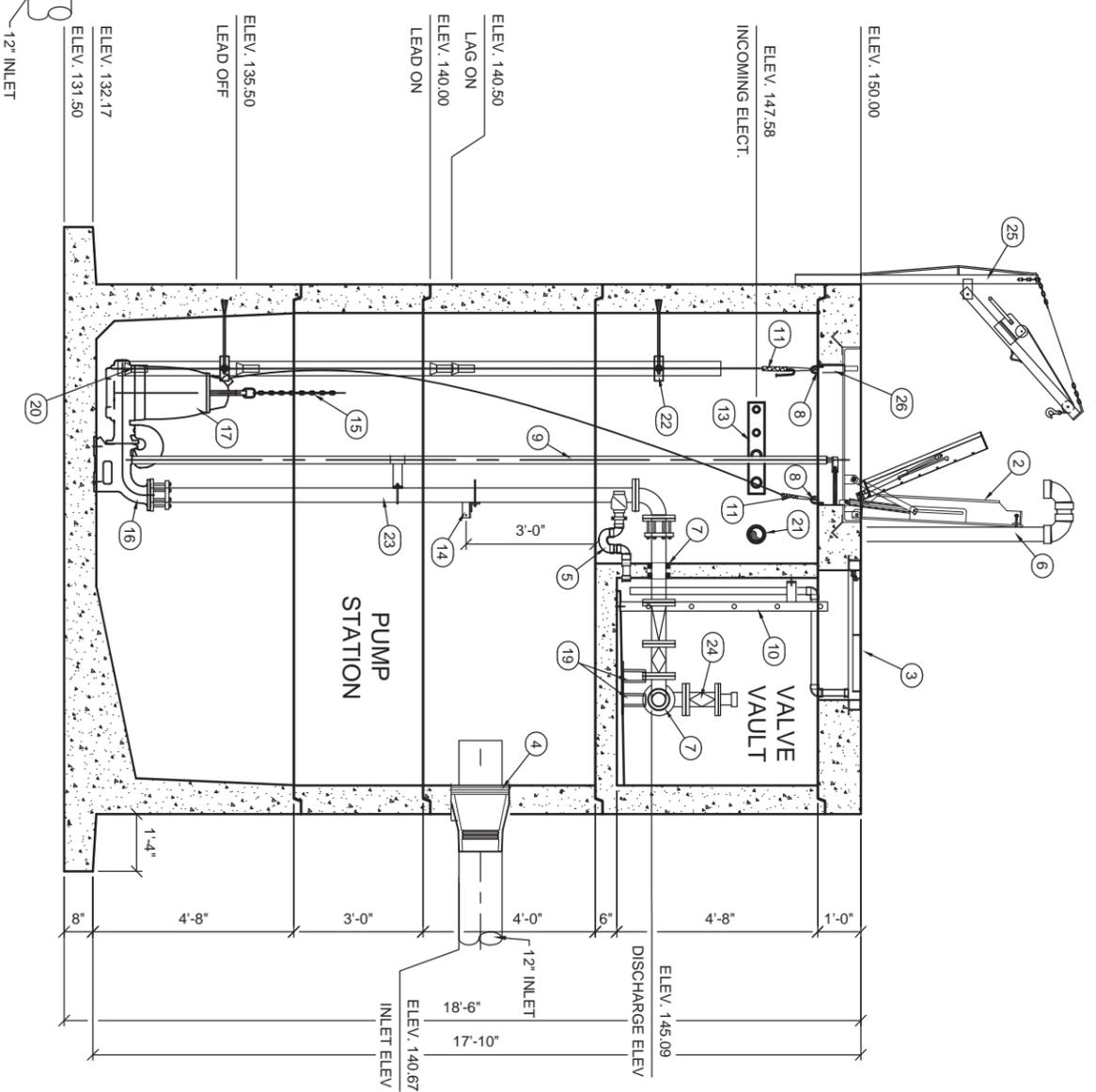
PLAN VIEW
ROOF REMOVED
SCALE: 1/4" = 1'-0"



BASE PLAN VIEW
SCALE: 1/4" = 1'-0"



END VIEW (HOIST BRACKET)
SCALE: 1/4" = 1'-0"



SECTION A-A
SCALE: 1/4" = 1'-0"

PARTS LIST	
ITEM QTY	NAME
1	ONE-LIFT 6'-0" x 11'-0" ROUNDED CORNER PRECAST CONCRETE PUMP STATION WITH INTEGRAL VALVE VAULT
2	36" x 54" ALUMINUM ACCESS HATCH, H20 TRAFFIC LOADING, WITH SAFETY GRATING & 6-HOOK STAINLESS CABLE SUPPORT BRACKET, E.I.W
3	30" x 36" ALUMINUM ACCESS HATCH, H20 TRAFFIC LOADING, WITH SAFETY GRATING, E.I.W
4	MH BOOT FOR 12" PVC INLET W/16" CORE
5	VALVE VAULT PVC DRAIN ASSEMBLY
6	4" SCH80 PVC PASSIVE VENT ASS'Y, WITH STAINLESS INSECT SCREEN - SEE DETAIL SHEET 4
7	LINK SEAL FOR 4" DIP, WITH 8" CORED OPENING
8	6 HOOK FLOAT BRACKET, STAINLESS STEEL, E.I.W
9	2" PUMP GUIDE RAIL x 16'-1 1/2" 316 STAINLESS STEEL - RAILS WILL BE LEFT LONG BY APPROX. 6" FOR FINAL CUTTING TO EXACT LENGTH BY OTHERS, AFTER FINAL STATION ERECTING IN THE FIELD (SHIP LOOSE)
10	ALUMINUM LADDER WITH SERRATED RUNGS (4'-10") 7" STANDOFF (SHIP LOOSE)
11	2 SS SUPPORT GRIPS, SERVICE DROP FOR PUMPS & TRANSDUCER CABLES
12	1 4-GANG CONDUIT PLATE WITH WATERSTOP AND SS HDWR. - SEE DETAIL PAGE 3
13	1 AREA FOR CABLE ENTRANCE & SUPPORT - SEE DETAILS SHEET 4
14	1 STAINLESS MID-SPAN PIPE SUPPORT ASSEMBLY - SEE DETAIL SHEET 5
15	1 PUMP LIFTING CABLE/CHAIN SUPPLIED WITH PUMPS
16	2 4" SUBMERSIBLE PUMP BASE
17	2 SUBMERSIBLE PUMPS (FLYGT 3171 HT) (SHIPPED LOOSE, INSTALLED ON SITE BY OTHERS)
18	3 6" ANGLE WALL-MOUNT PIPE SUPPORT
19	3 6" PIPE FLANGE GRADE SUPPORT - FLOOR MOUNT
20	1 (4) LEVEL CONTROL/ALARM FLOATS & (1) PRIMARY SUBMERSIBLE LEVEL TRANSDUCER, ADJUSTABLE, SET IN THE FIELD BY OTHERS, PULLING CABLES TO J-BOX OR POP AND TERMINATION BY OTHERS, SUPPLIED WITH CONTROLS (SHIP LOOSE)
21	1 TERMA-DUCT FOR 4" STATION VENT
22	2 STAINLESS MID-SPAN PIPE SUPPORT ASSEMBLY - SEE DETAIL SHEET 4
23	2 4" DIP x 11'-3", FEPE, CL, MFG-SUPPLIED TAR COAT EXTERIOR
24	1 T-4" BYPASS, GA PLUG VALVE
25	1 1,000 lb 316 STAINLESS PORTABLE HOIST WITH 30' DEDICATED PUMP LIFTING CABLE, SEE ITEM #15 ABOVE
26	1 HATCH DRAIN INTO WET WELL
27	1 LINK SEAL FOR 4" PVC, WITH 6" CORED OPENING
28	2 HOIST BRACKET

REFER TO CUT SHEETS FOR FULL EQUIPMENT DETAILS & OPTIONS

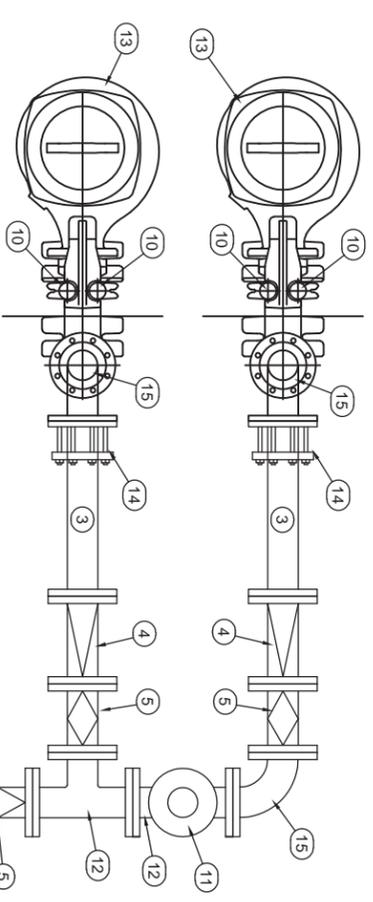


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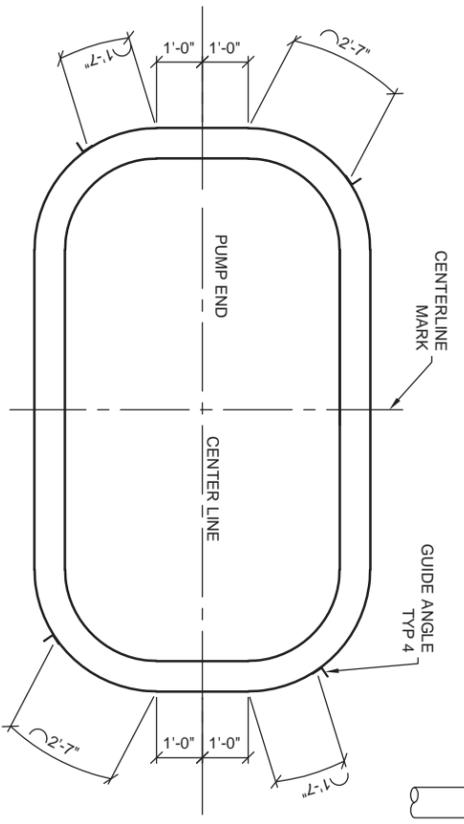
RC611 PUMP STATION (17'-10")
STATION LAYOUT
VILLAGE PUMP STATION
CITY OF BAINBRIDGE ISLAND, WA

APPROVED FOR FABRICATION

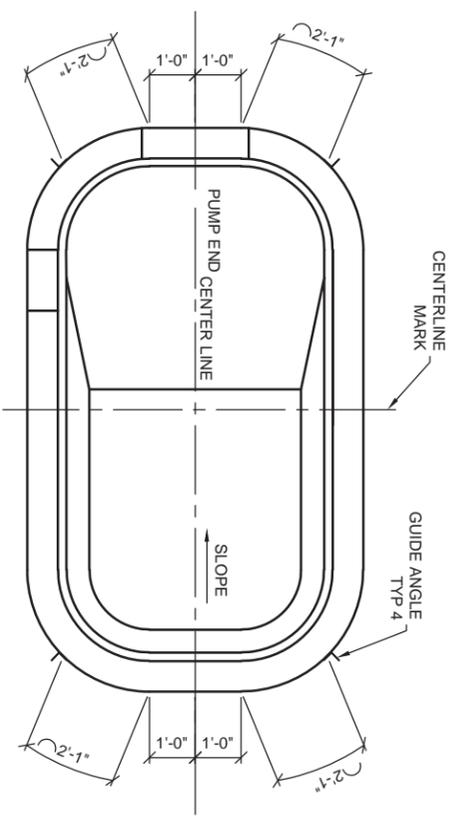
CUSTOMER		WHITNEY EQUIPMENT	
DATE	DRAWN	ENGINEER	DATE
3/22/18	RDW		
DRAWING NUMBER	REVISION	PM	SALES ORDER
RC611X1710.dwg	5		2 OF 6



PLAN VIEW
SCALE: 1" = 1'-0"



GUIDE ANGLE LOCATIONS (SECT. 3)
SCALE: 1/4" = 1'-0"



GUIDE ANGLE LOCATIONS (SECT. 1)
SCALE: 1/4" = 1'-0"



Flange Bolt Tightening Sequence
(Use Appropriate Gaskets and Bolts)

Dimensions of 150 LB. A5A Steel Flanges

Normal Pipe Size	Flange O.D.	Thickness*	O.D. of Raised Face	Bolt Circle	# of Bolts	Bolt Holes	Dia. of Bolts
1"	4 1/2"	3/16"	2"	3 1/8"	4	5/8"	1/2"
1 1/2"	5"	11/16"	2 7/8"	3 7/8"	4	5/8"	1/2"
2"	6"	3/4"	3 5/8"	4 3/4"	4	5/8"	5/8"
2 1/2"	7"	7/8"	4 1/8"	5 1/2"	4	5/8"	5/8"
3"	7 1/2"	15/16"	4 1/2"	6"	4	5/8"	5/8"
4"	8 1/2"	1 1/16"	5 1/8"	7 1/2"	4	5/8"	5/8"
5"	9 1/2"	1 1/8"	6 1/8"	8 1/2"	4	5/8"	5/8"
6"	10 1/2"	1 1/4"	7 1/4"	9 1/2"	4	5/8"	5/8"
8"	13 1/2"	1 3/8"	10 5/8"	11 3/4"	8	7/8"	3/4"

* 3/16" raised face is provided in the thickness.

Normal Pipe Size	Flange O.D.	Thickness*	O.D. of Raised Face	Bolt Circle	# of Bolts	Bolt Holes	Dia. of Bolts
1"	4 1/2"	3/16"	2"	3 1/8"	4	5/8"	1/2"
1 1/2"	5"	11/16"	2 7/8"	3 7/8"	4	5/8"	1/2"
2"	6"	3/4"	3 5/8"	4 3/4"	4	5/8"	5/8"
2 1/2"	7"	7/8"	4 1/8"	5 1/2"	4	5/8"	5/8"
3"	7 1/2"	15/16"	4 1/2"	6"	4	5/8"	5/8"
4"	8 1/2"	1 1/16"	5 1/8"	7 1/2"	4	5/8"	5/8"
5"	9 1/2"	1 1/8"	6 1/8"	8 1/2"	4	5/8"	5/8"
6"	10 1/2"	1 1/4"	7 1/4"	9 1/2"	4	5/8"	5/8"
8"	13 1/2"	1 3/8"	10 5/8"	11 3/4"	8	7/8"	3/4"

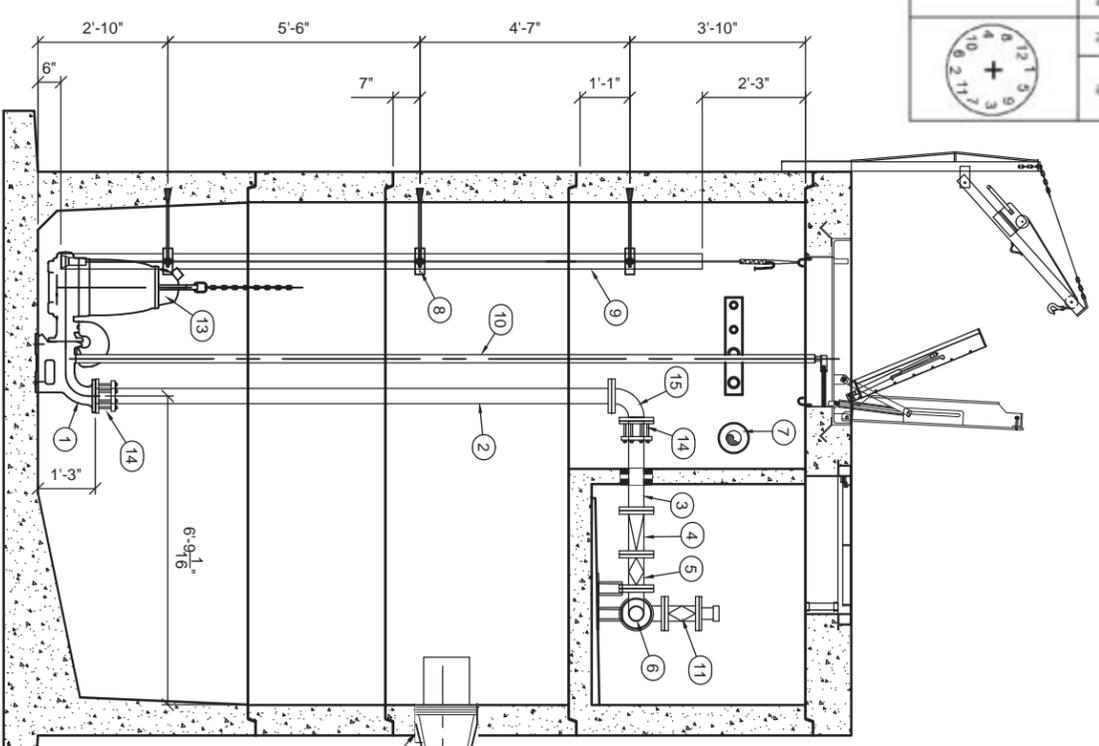
Notes: 1. Values in this table are for flanges in accordance with the requirements of the ASME B16.5 standard. 2. The actual dimensions of the flanges may vary slightly from those shown in this table. 3. Do not receive torque the flange when using these dimensions.

PVC Flange Torque Specs

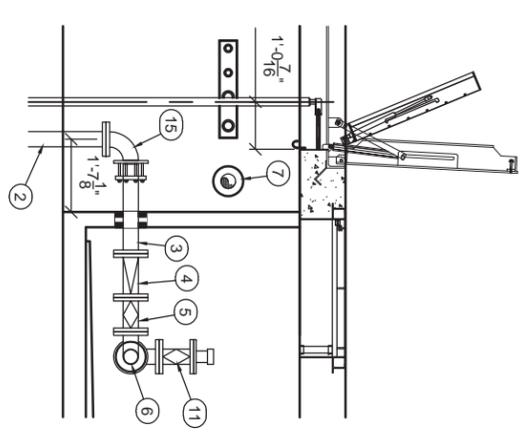
Flange Size (In.)	Recommended Torque (ft. lbs.)
1/2" - 1-1/2"	12
2 - 4	25
5	30
6-8	40
10	64
12	95
14 - 24	110

PARTS LIST

ITEM QTY	NAME
1	SUBMERSIBLE PUMP BASE ELBOWS
2	4" DIP x 11"-3", FEPE, CL. MFG-SUPPLIED TAR COAT EXTERIOR
3	2 4" DIP x 23 3/4" LG., FE x PE, CL. FG-SUPPLIED TAR COAT EXTERIOR
4	2 4" FLANGED AIR CUSHIONED CHECK VALVE, MATCO, CAST IRON, STD. MFG EPOXY COATED, L&W - ORDER WITH L&W MOUNDED ON OPPOSITE SIDES (MIRROR IMAGE)
5	3 4" FLANGED GA PLUG VALVE W/LEVER OPERATOR, STD. MFG. EPOXY COATED
6	1 4" DIP x 48" LG., FE x PE, CL. MFG-SUPPLIED TAR COAT EXTERIOR,
7	1 TERM-DUCT FOR 4" STATION VENT
8	3 4" STAINLESS RISER CLAMP WITH 1/2" THREADED ROD TO 1/2" STAINLESS WALL INSERT (TYP. FOR 3-ASSEMBLES)
9	1 STILLING WELL - 4" SCH80 PVC PIPE (14'-0" LONG)
10	2 2" PUMP GUIDE RAIL x 16'-1 1/2", 316 STAINLESS STEEL - RAILS WILL BE LEFT LONG BY APPROX. 6" FOR FINAL CUTTING TO EXACT LENGTH BY OTHERS, AFTER FINAL STATION ERECTING IN THE FIELD (SHIP LOOSE)
11	1 T-4" BYPASS, GA PLUG VALVE
12	2 4" DI FLANGED TEE, CL. MFG-SUPPLIED TAR COAT EXTERIOR
13	2 SUBMERSIBLE PUMPS (FLYGT 3171 HI) (SHIPPED LOOSE, INSTALLED ON SITE BY OTHERS)
14	4 4" FLANGED COUPLING ADAPTER, (EBA-IRON INC. SERIES 2104005516)
15	3 4" DI FLANGED 90, CL. MFG-SUPPLIED TAR COAT EXTERIOR



ELEVATION VIEW A-A
SCALE: 1/4" = 1'-0"



REFER TO CUT SHEETS FOR FULL EQUIPMENT DETAILS & OPTIONS



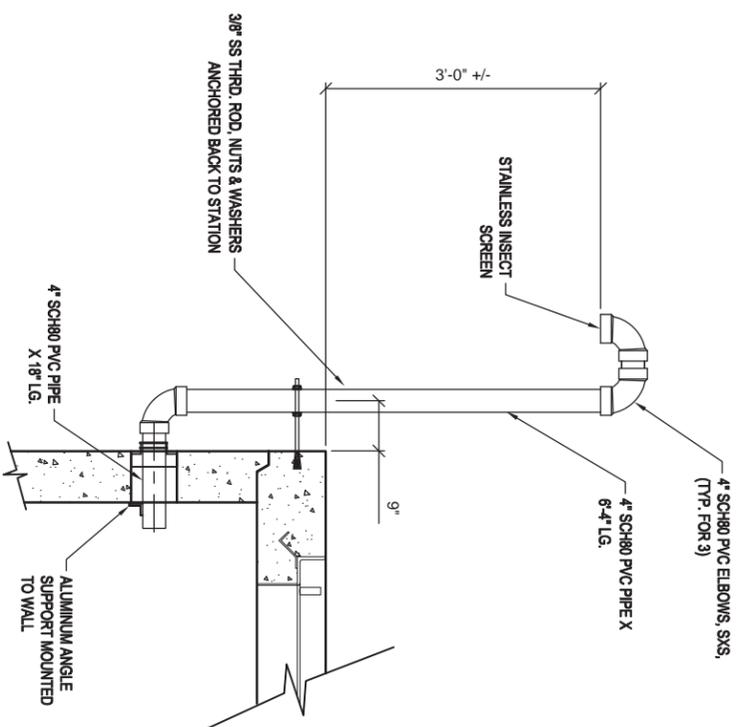
RC611 PUMP STATION (17'-10")
PIPING LAYOUT
VILLAGE PUMP STATION
CITY OF BAINBRIDGE ISLAND, WA

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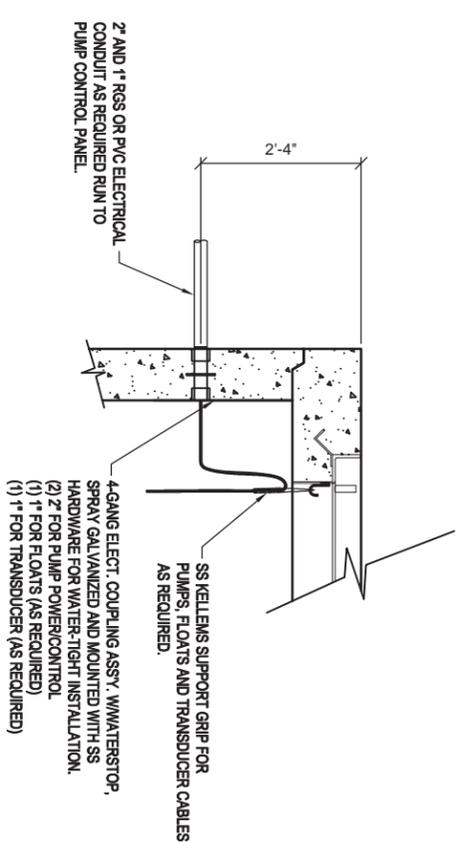
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3/22/18	RDW				

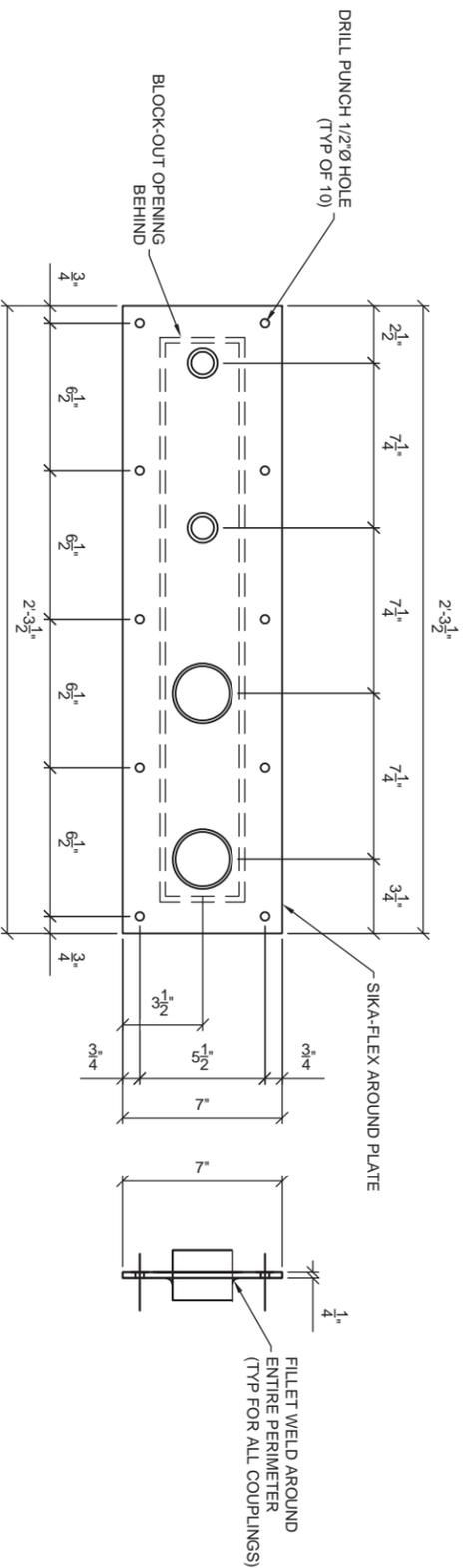
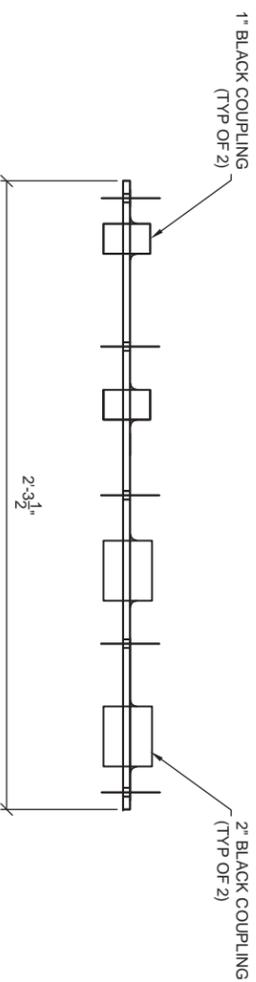
DRAWING NUMBER: RC611X1710.dwg REVISION: 5 SHEET: 3 OF 6



4" PVC PASSIVE VENT DETAIL
SCALE: 3/8" = 1'-0"



ELECTRICAL ENTRANCE DETAIL
SCALE: 3/8" = 1'-0"



4-GANG ELECTRICAL COUPLING ASSEMBLY
SCALE: 1-1/2" = 1'-0"



411 E. 17th Avenue, AZ 85225
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RC611 PUMP STATION (17'-10")

DETAILS

VILLAGE PUMP STATION
CITY OF BANBRIDGE ISLAND, WA

CUSTOMER

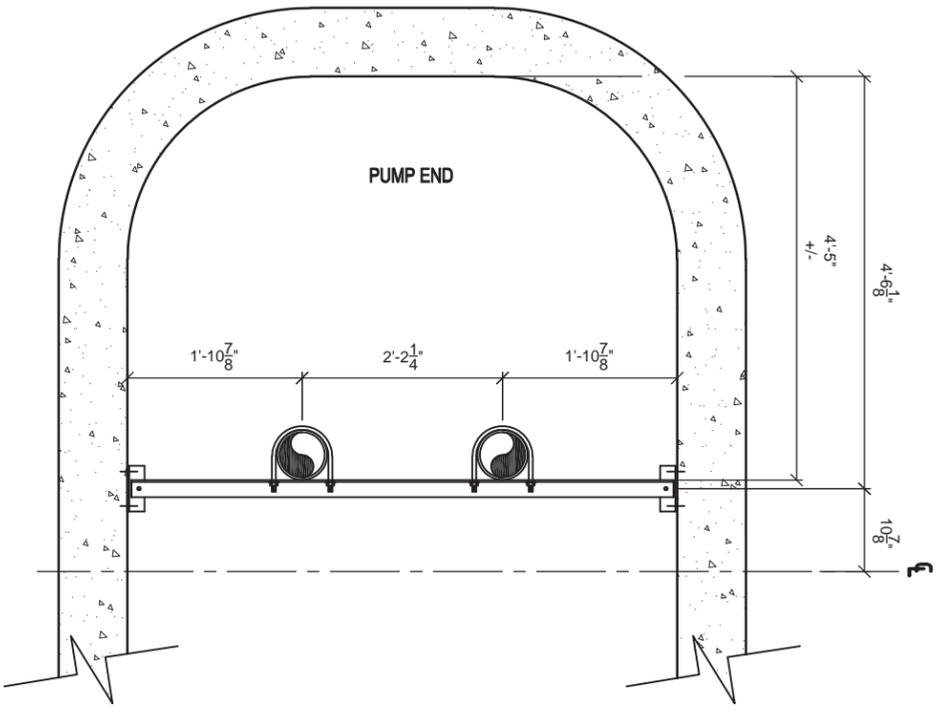
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3/22/18	RDW				

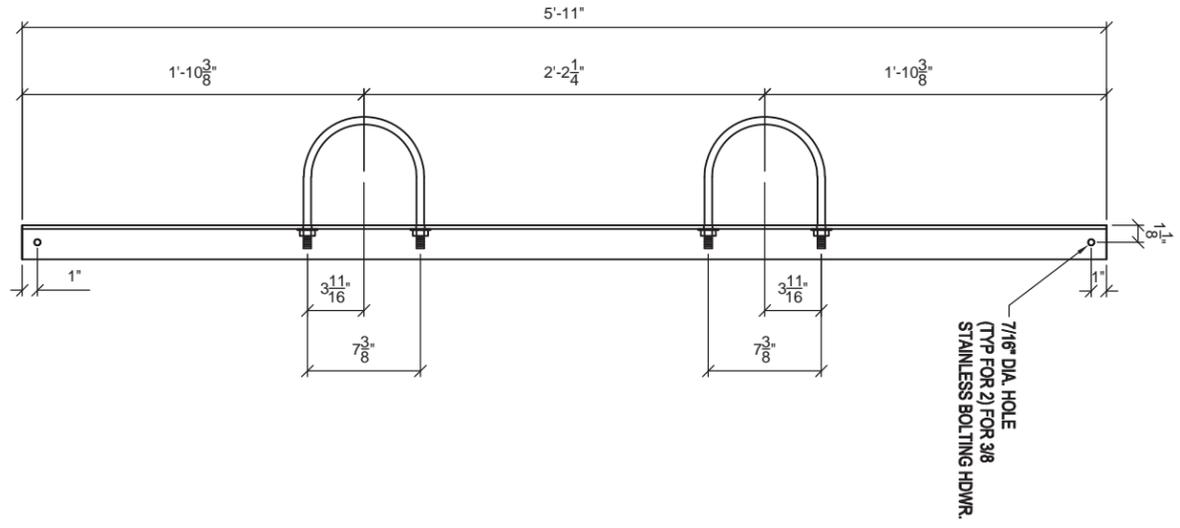
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RC611X1710.dwg	5	4 OF 6

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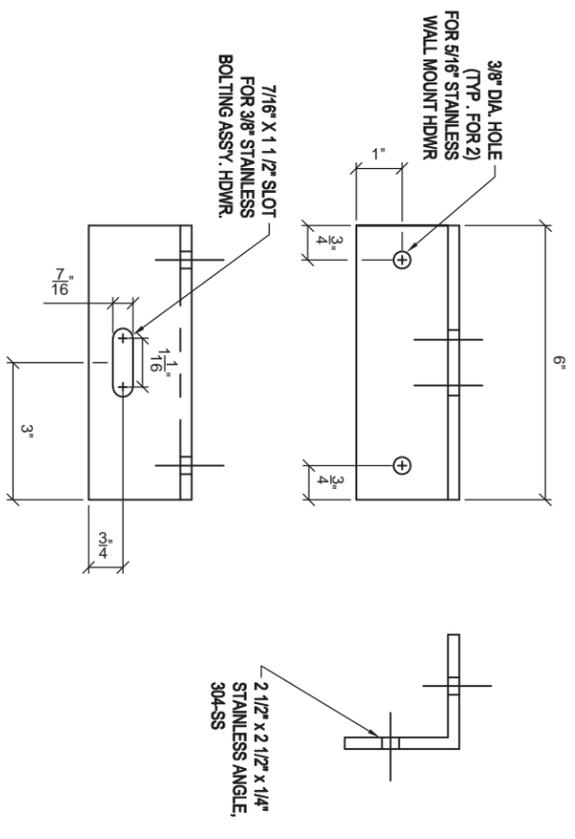
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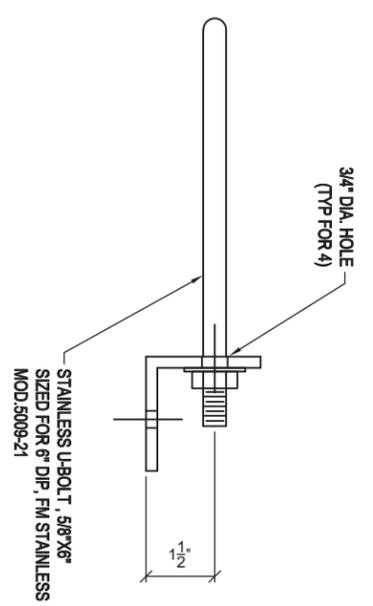
WET WELL PIPE SUPPORT DETAIL
SCALE: 1/2" = 1'-0"



SUPPORT CROSS BRACE TOP VIEW DETAIL
SCALE: 1" = 1'-0"



SUPPORT WALL BRACKET
(2-REQD. PER BRACE)
SCALE: 3" = 1'-0"



SUPPORT CROSS BRACE SIDE VIEW DETAIL
SCALE: 3" = 1'-0"



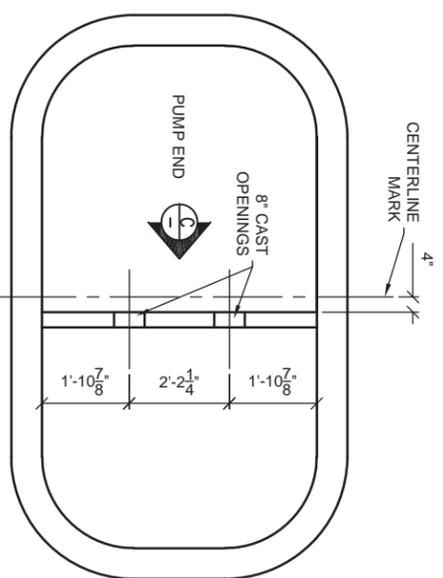
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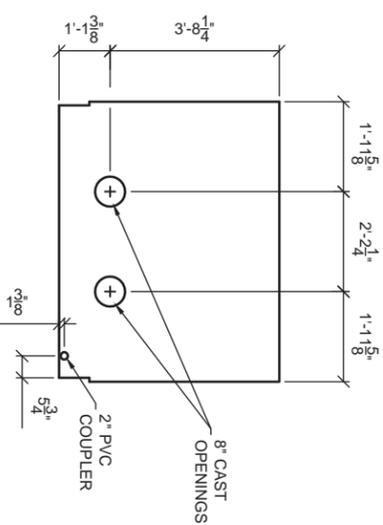
RC611 PUMP STATION (17'-10")

DETAILS
VILLAGE PUMP STATION
CITY OF BANBRIDGE ISLAND, WA

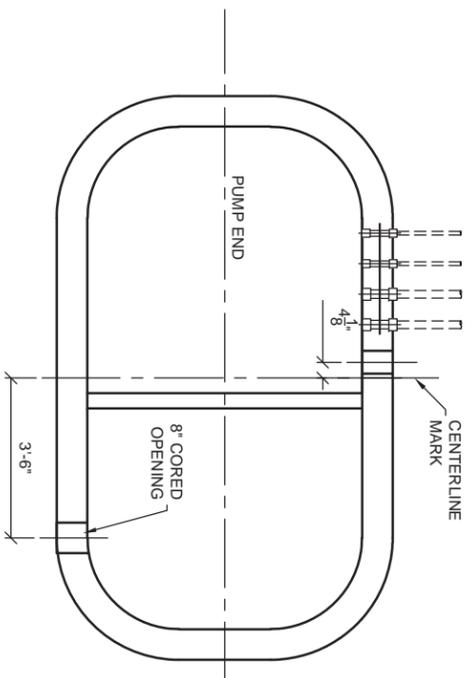
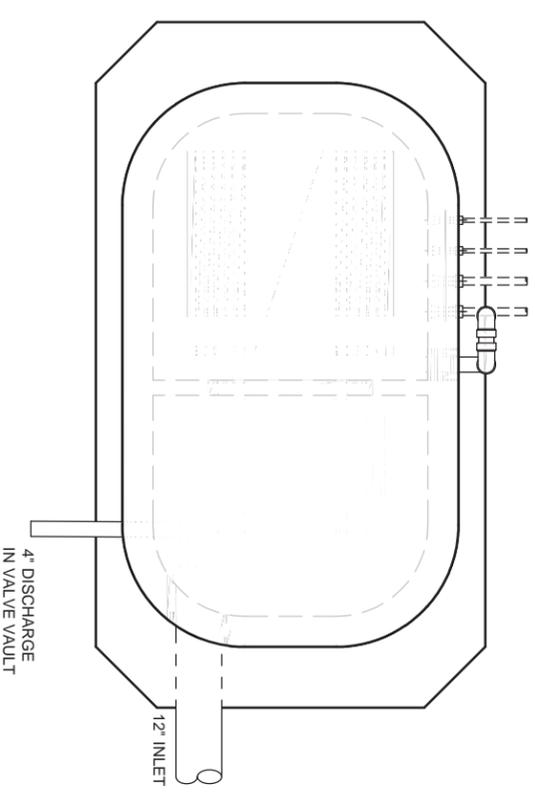
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3/22/18			
BY: _____	DATE: _____	DRAWN BY: _____	ENGINEER: _____
		RC611X1710.dwg	RC611X1710.dwg
		5	5
		OF	OF
		6	6



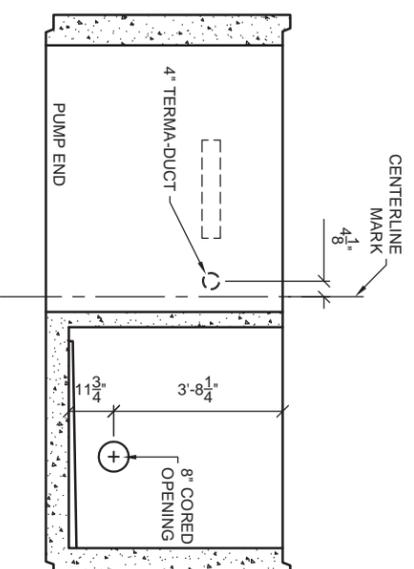
PLAN VIEW
SCALE: 1/4" = 1'-0"



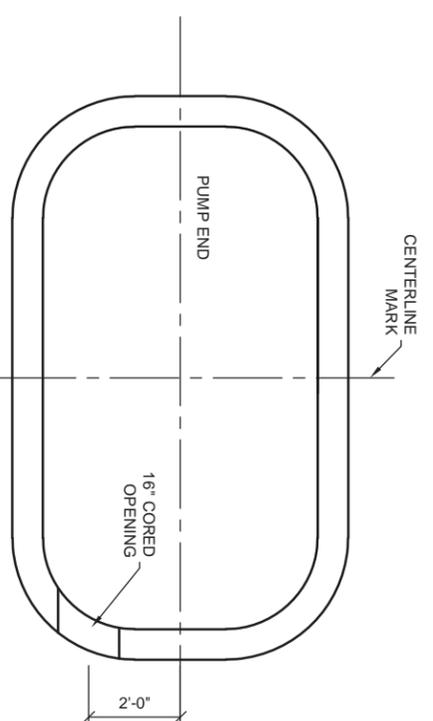
VALVE VAULT WALL ELEVATION
SCALE: 1/4" = 1'-0"



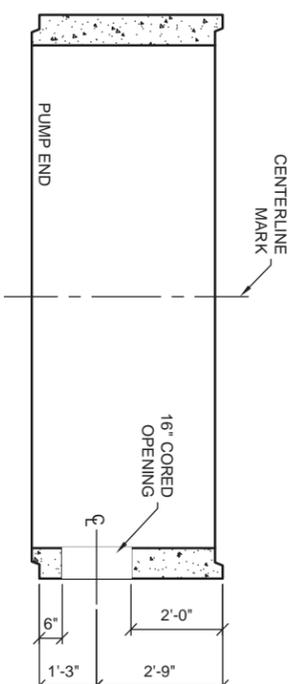
VALVE VAULT PLAN VIEW
SCALE: 1/4" = 1'-0"



WALL ELEVATION A
SCALE: 1/4" = 1'-0"



4' RISER (SECT. 3) PLAN VIEW
SCALE: 1/4" = 1'-0"



WALL ELEVATION A
SCALE: 1/4" = 1'-0"

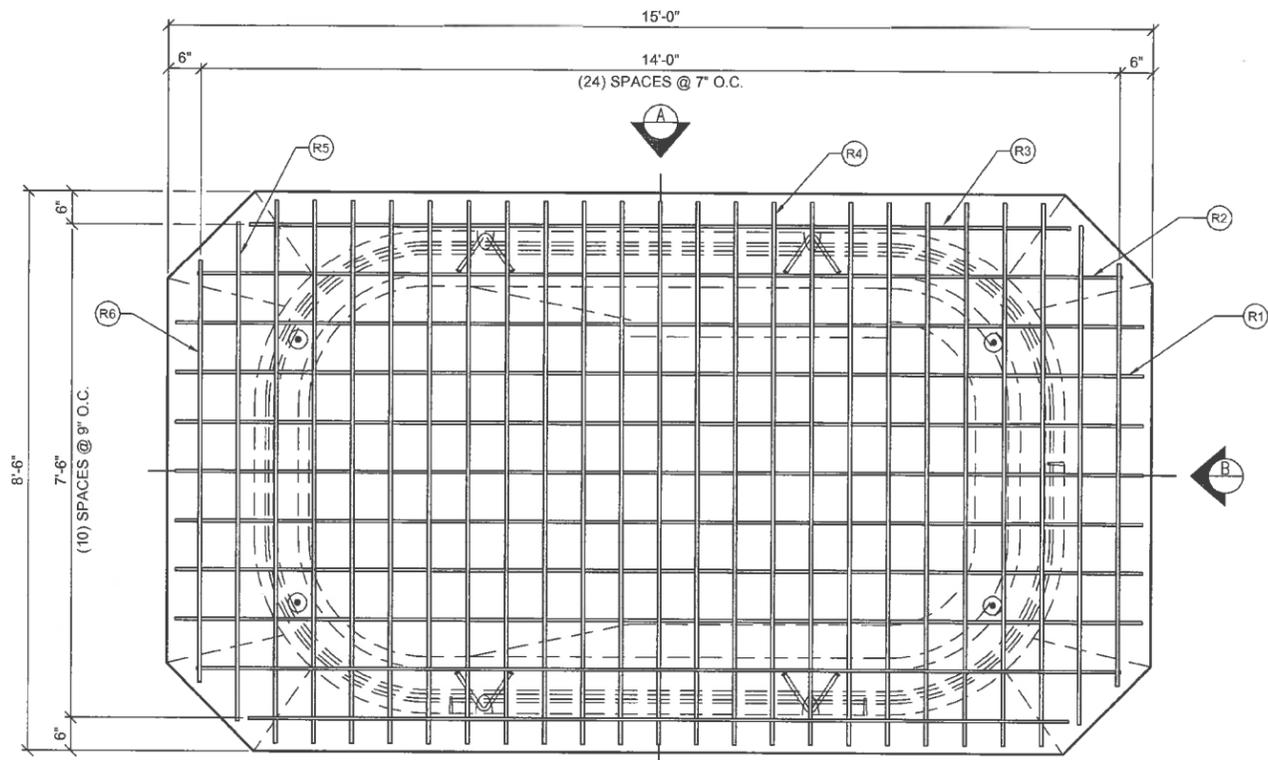


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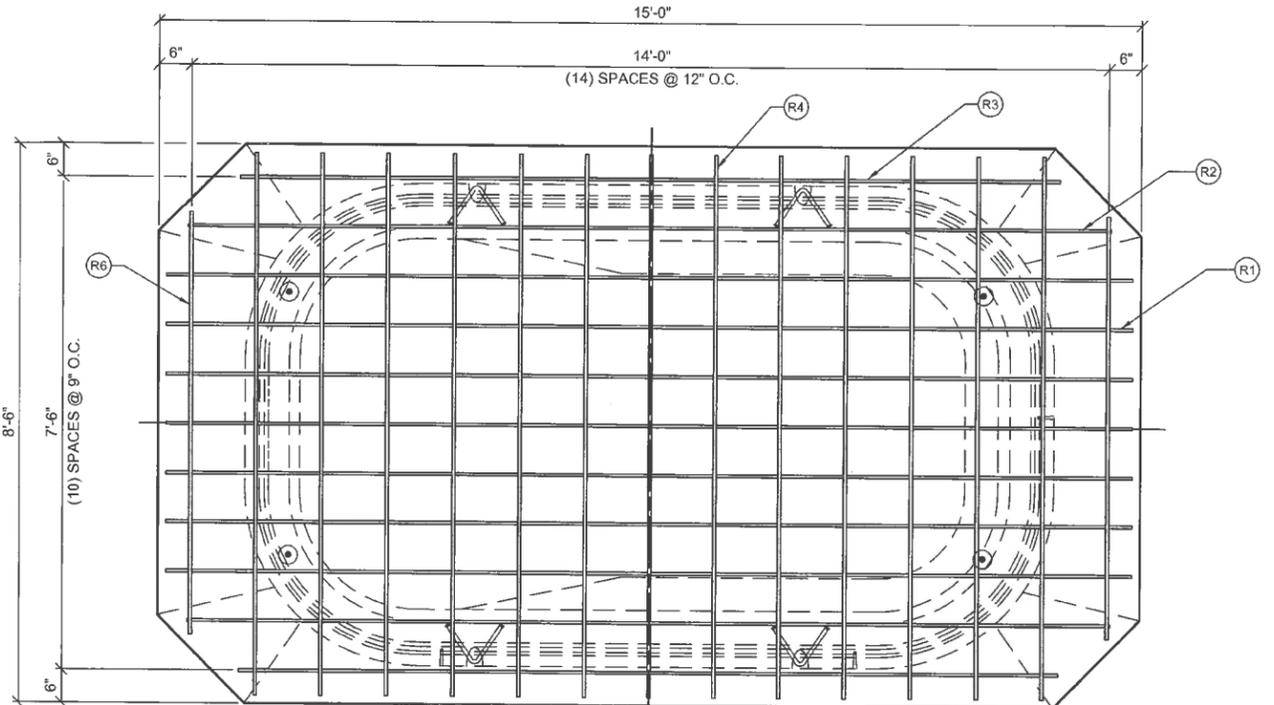
RC611 PUMP STATION (17'-10")
CORING LAYOUT
VILLAGE PUMP STATION
CITY OF BANBRIDGE ISLAND, WA

		APPROVED FOR FABRICATION	
DATE	3/22/18	DATE	
BY:		DATE:	
DRAWN	RDW	ENGINEER	PM
DRAWING NUMBER	RC611X1710.dwg	REVISION	5
		SHEET	6 OF 6

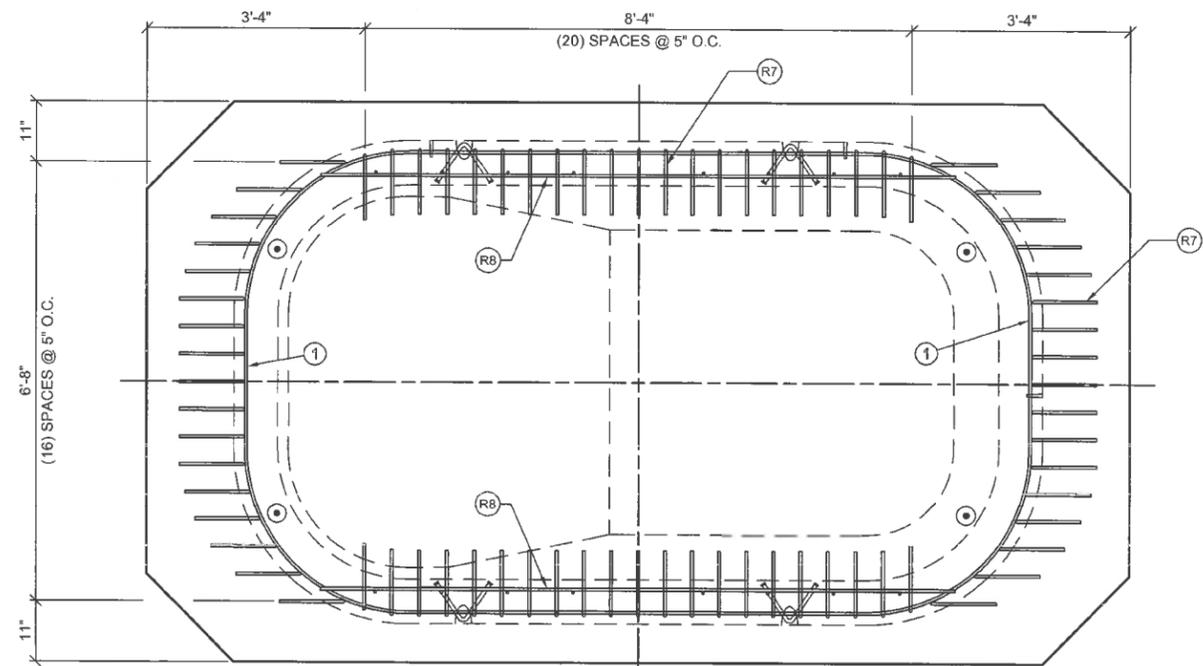
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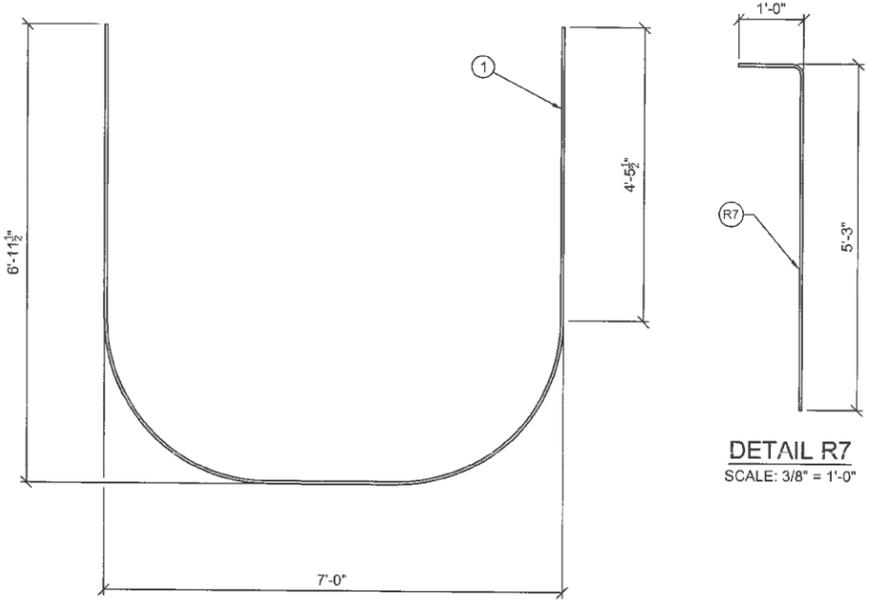
PLAN VIEW (TOP MAT)
SCALE: 3/8" = 1'-0"



PLAN VIEW (BOTTOM MAT)
SCALE: 3/8" = 1'-0"



PLAN VIEW (INSIDE & OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



#4 U-BAR DETAIL
SCALE: 3/8" = 1'-0"

DETAIL R7
SCALE: 3/8" = 1'-0"

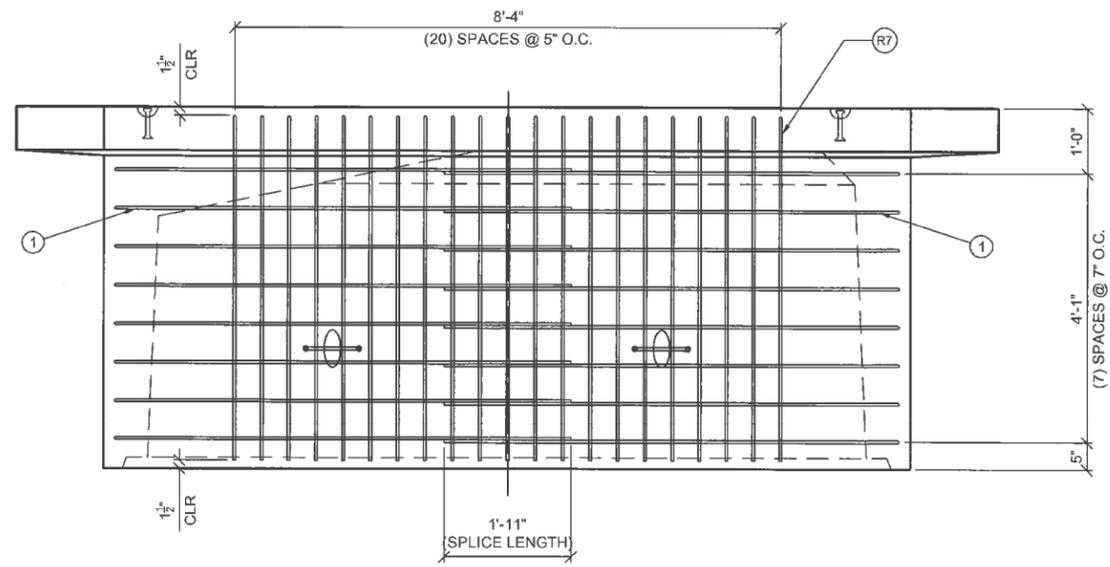
PARTS LIST		
ITEM	QTY	DESCRIPTION
1	16	#4 U-BAR

APPROVED FOR LAYOUT
BY: _____ DATE: _____

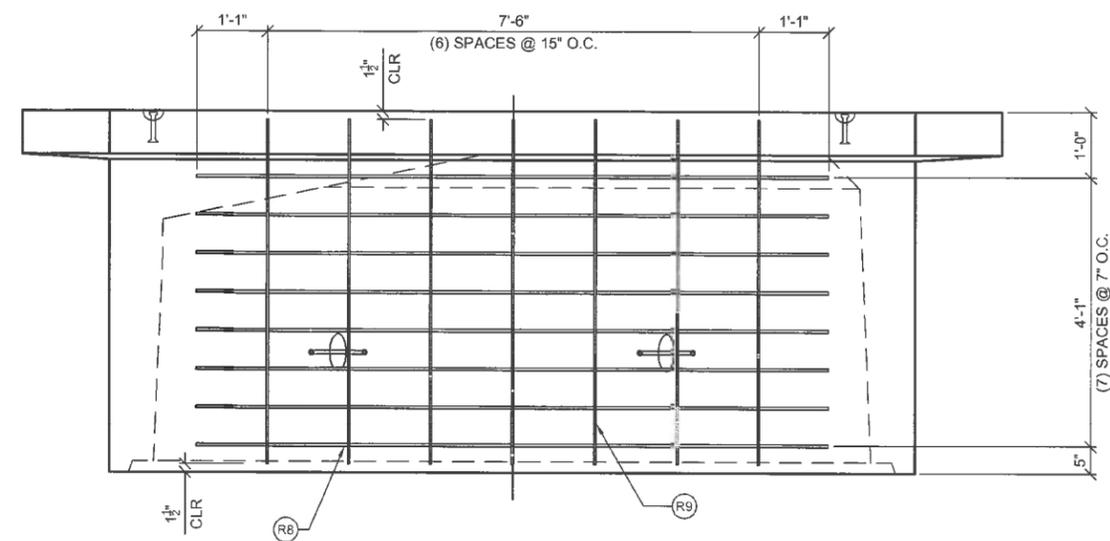
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BY: FS DATE: 2-8-18

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611 BASE - CASTING STEEL SHEET 1 1390600					
CUSTOMER: STANDARD					
DATE	DRAWN	ENGINEER	DATE	PM	SALES ORDER
2/2/18	RDW				
DRAWING NUMBER			REVISION	SHEET	
BASE CASTING AND REBAR			0	2 OF 3	

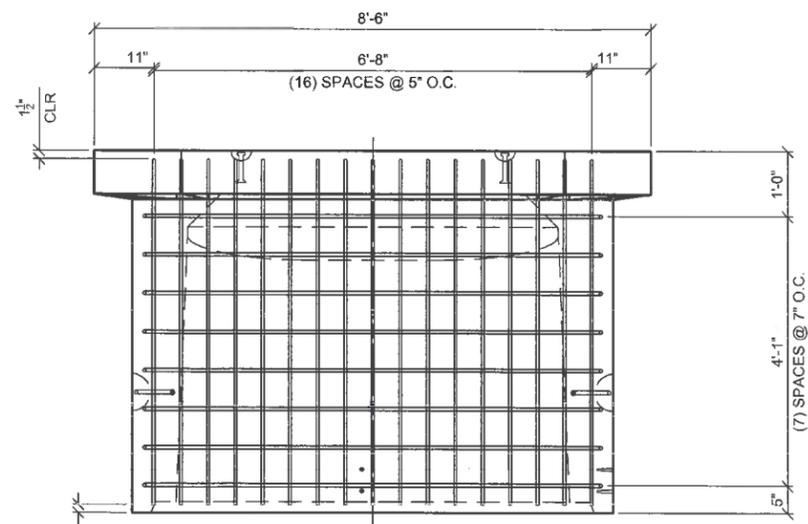
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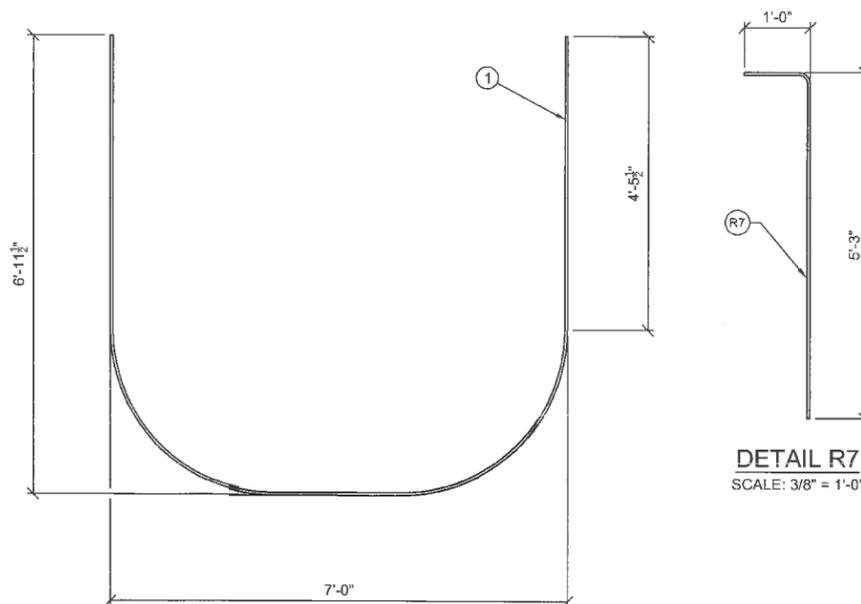
VIEW A (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



VIEW A (INSIDE MAT)
SCALE: 3/8" = 1'-0"



VIEW B (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



#4 U-BAR DETAIL
SCALE: 3/8" = 1'-0"

DETAIL R7
SCALE: 3/8" = 1'-0"

APPROVED FOR LAYOUT
BY: _____ DATE: _____

APPROVED FOR FABRICATION
BY: FS DATE: 2-8-18

Oldcastle Precast
411 E FRYE RD. CHANDLER AZ 85225
PHONE: (480) 953-2878 FAX: (480) 953-2108

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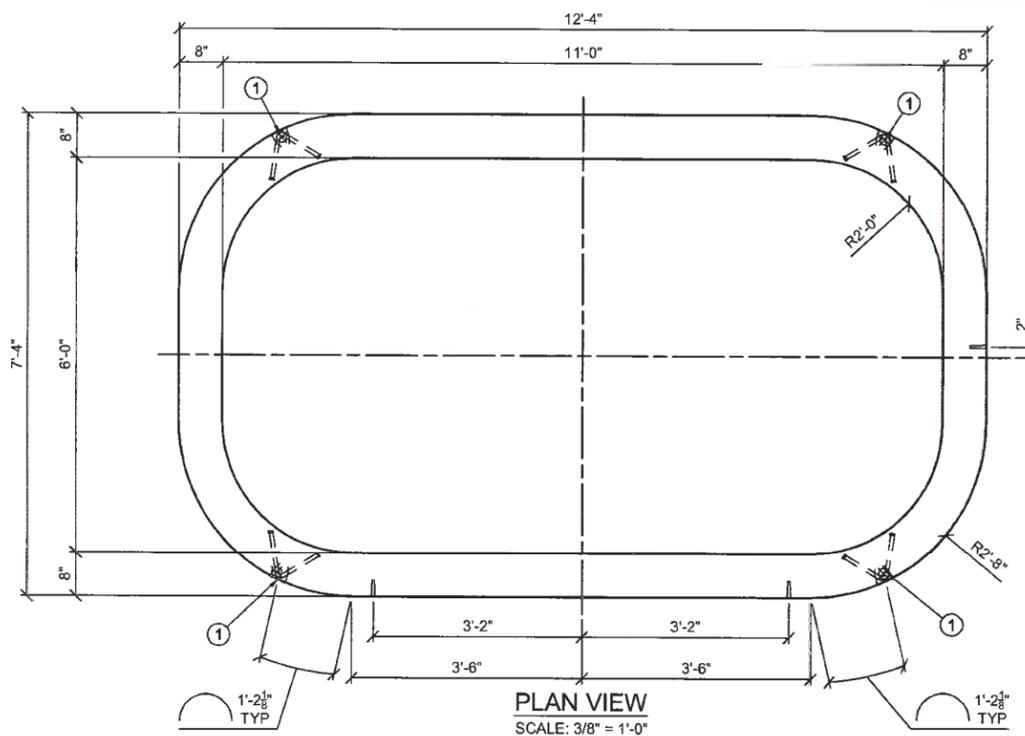
611 BASE - CASTING
STEEL SHEET 2

CUSTOMER: **STANDARD**

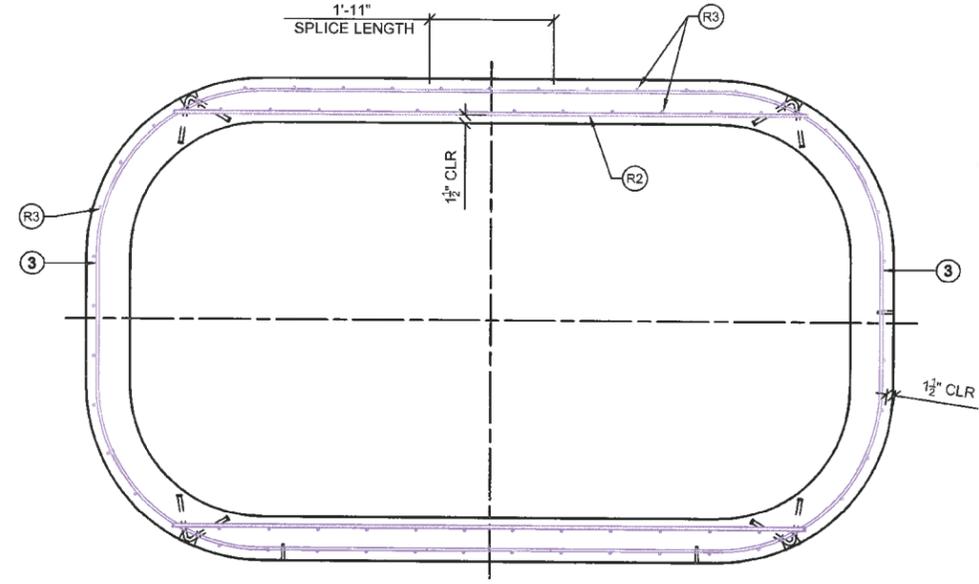
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2/2/18	RDW				

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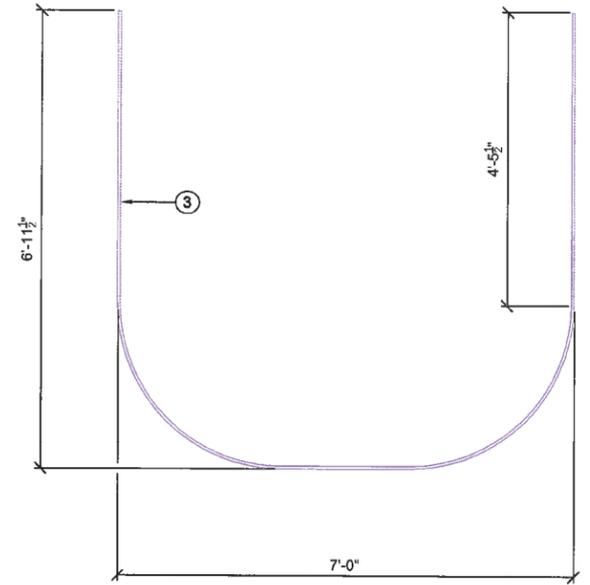
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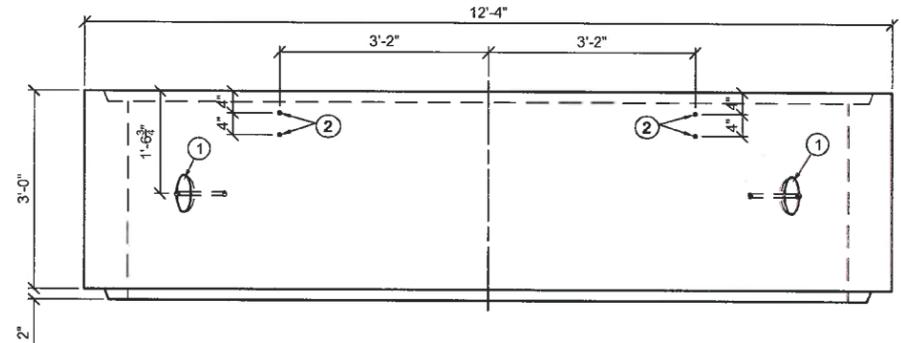
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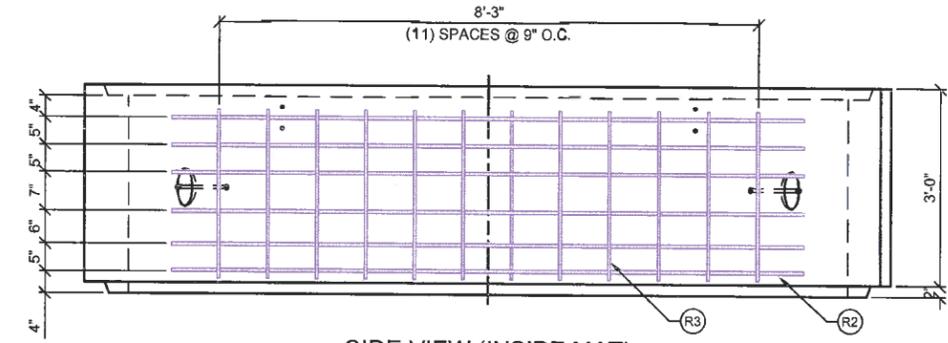
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SCALE: 3/8" = 1'-0"



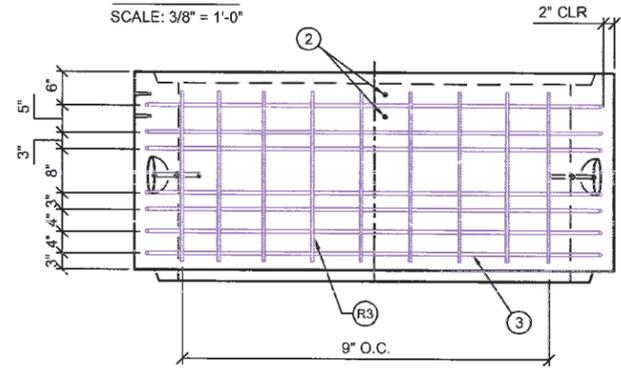
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SCALE: 3/8" = 1'-0"



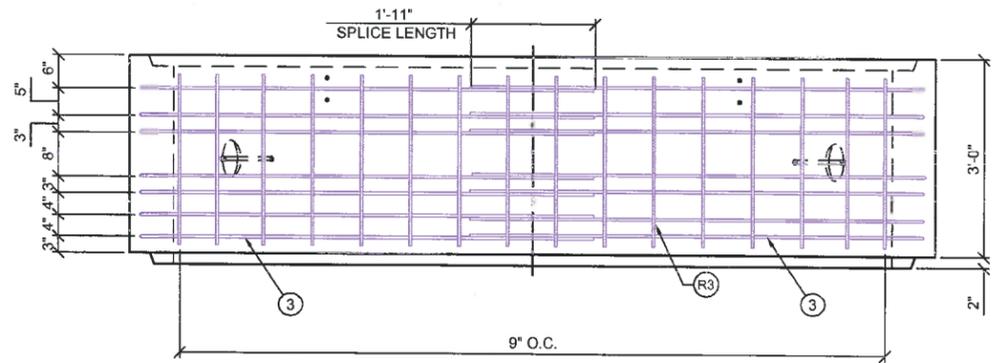
SIDE VIEW
SCALE: 3/8" = 1'-0"



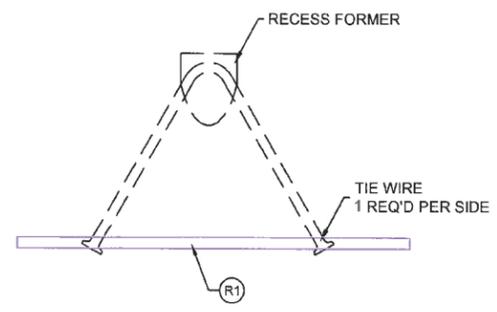
SIDE VIEW (INSIDE MAT)
SCALE: 3/8" = 1'-0"



END VIEW (OUTSIDE MAT REINFORCEMENT)
SCALE: 3/8" = 1'-0"



SIDE VIEW (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



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611 3' RISER
PRODUCTION AND STEEL

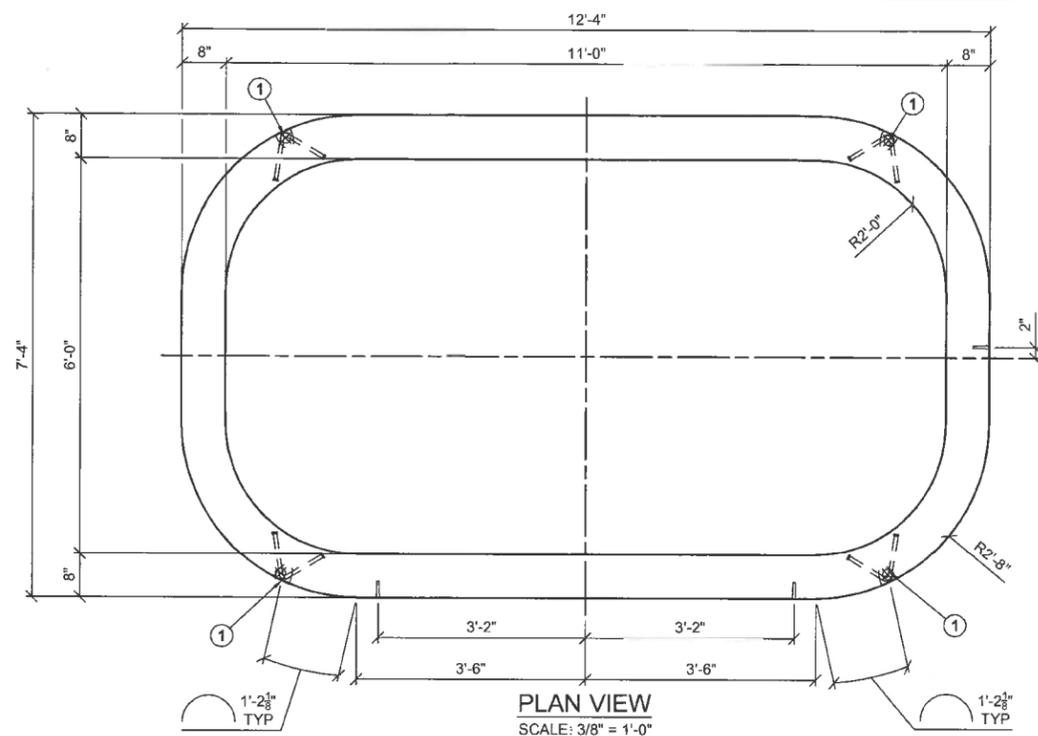
CUSTOMER
STANDARD

APPROVED FOR LAYOUT
BY: _____ DATE: _____

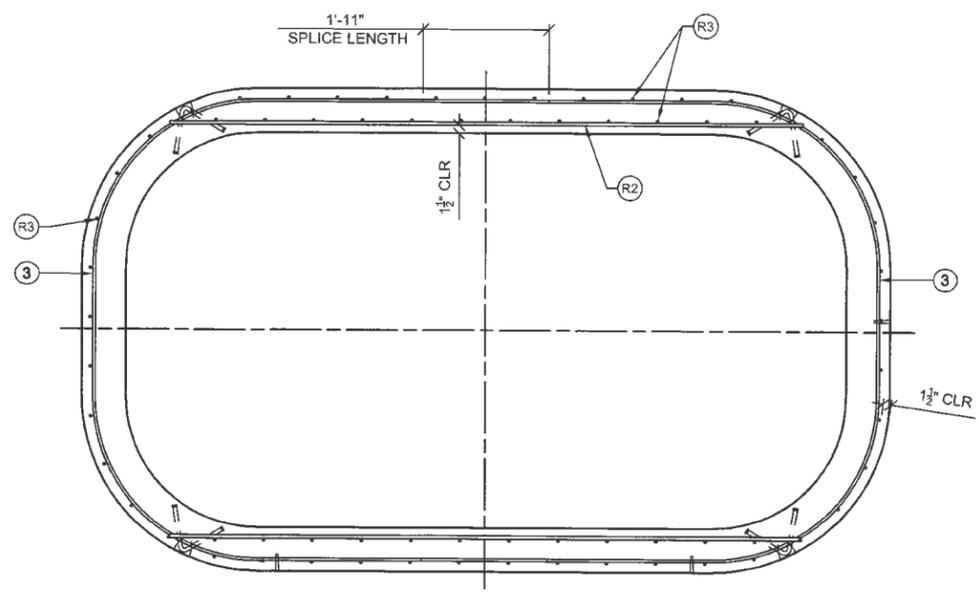
APPROVED FOR FABRICATION
BY: CP DATE: 1/19/19

DATE	DRAWN	ENGINEER	DATE	PM	SALES ORDER
05/02/18	ME				
DRAWINGS NUMBER			REVISION	SHEET	
3' RISER			0	1 OF 1	

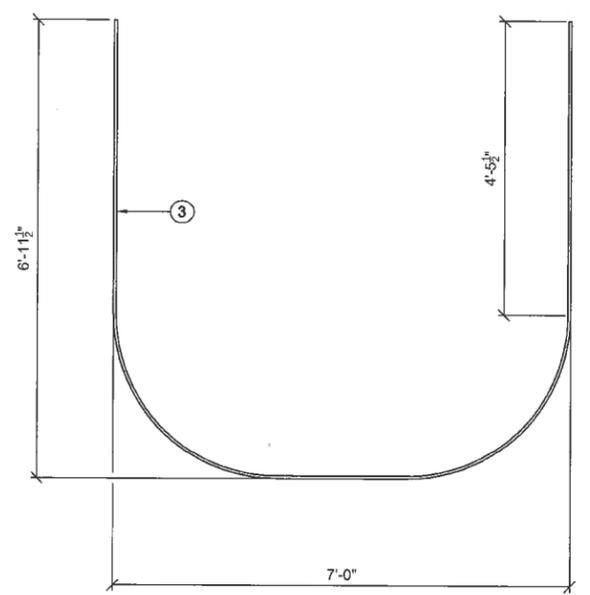
REV	DESCRIPTION	BY	DATE
0	INITIAL RELEASE	RDW	2/6/18



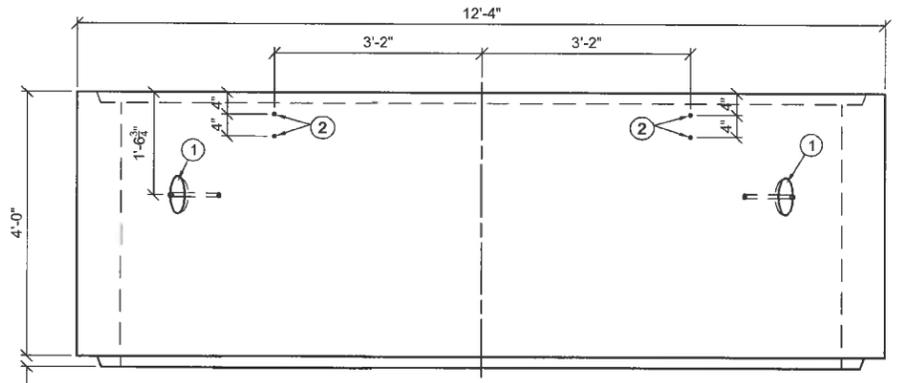
PLAN VIEW
SCALE: 3/8" = 1'-0"



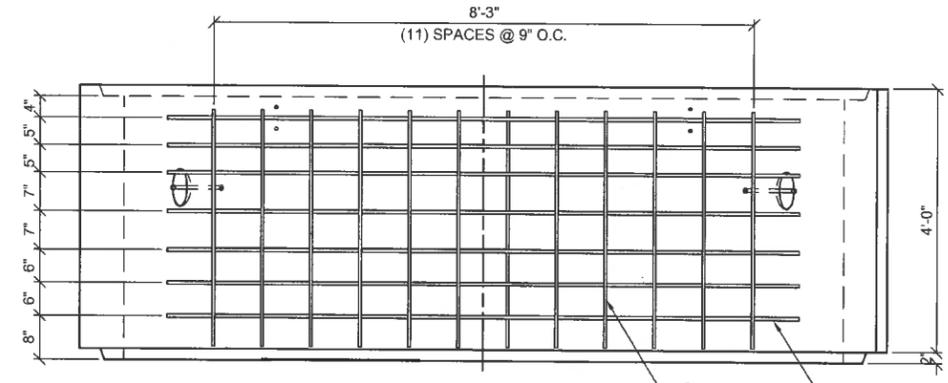
PLAN VIEW (REINFORCEMENT)
SCALE: 3/8" = 1'-0"



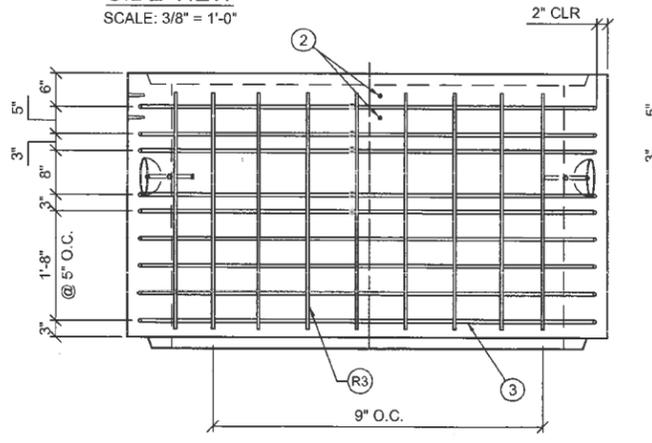
#4 U-BAR DETAIL
SCALE: 3/8" = 1'-0"



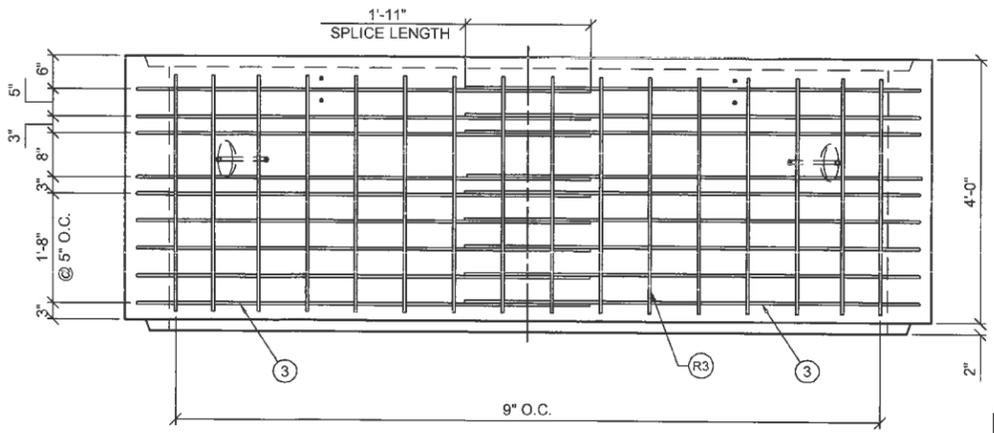
SIDE VIEW
SCALE: 3/8" = 1'-0"



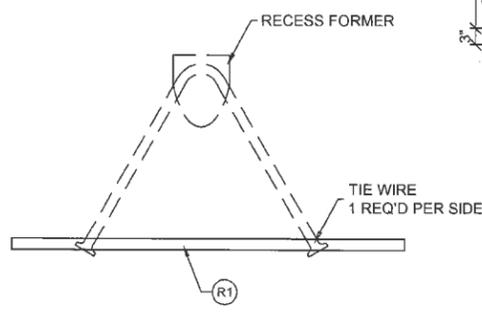
SIDE VIEW (INSIDE MAT)
SCALE: 3/8" = 1'-0"



END VIEW (OUTSIDE MAT REINFORCEMENT)
SCALE: 3/8" = 1'-0"



SIDE VIEW (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



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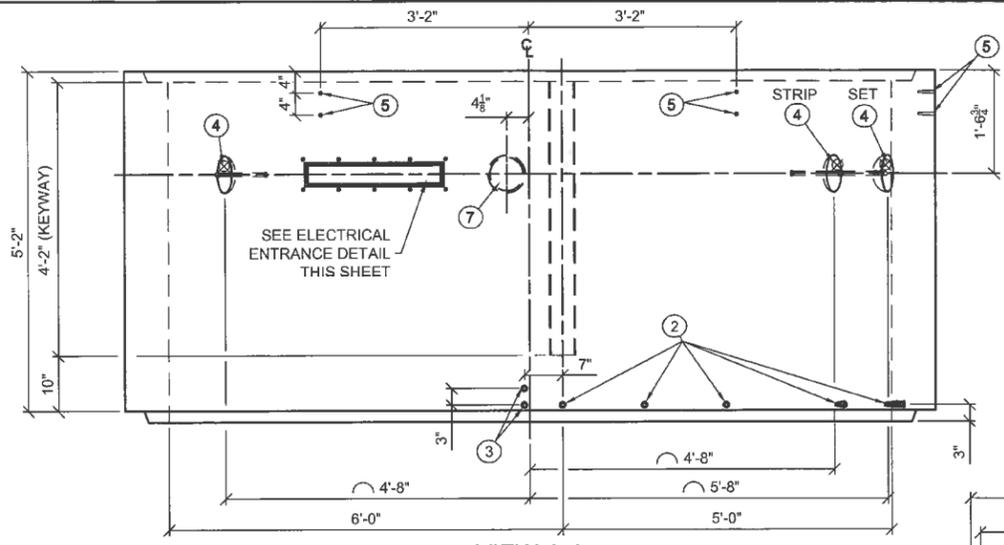
BY: _____ DATE: _____

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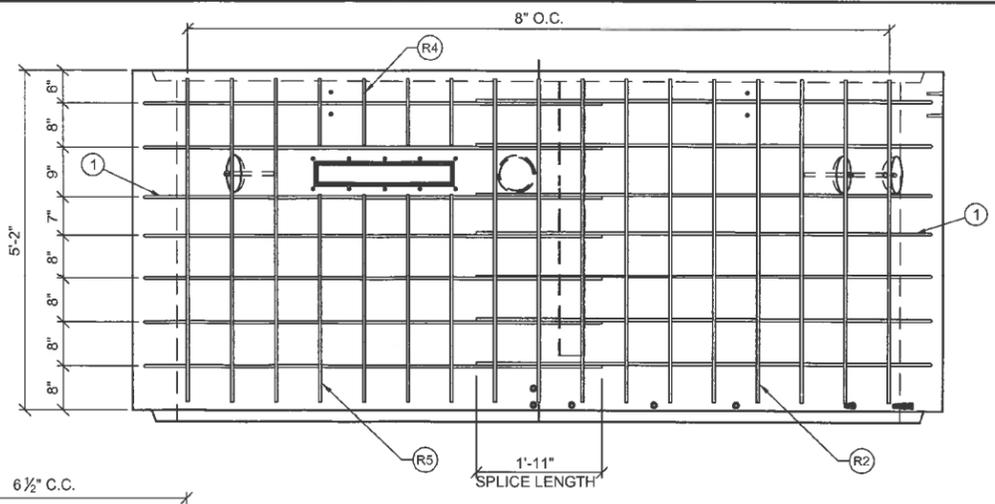
BY: *ES* DATE: *2-8-18*

611 4' RISER					
PRODUCTION AND STEEL					
<i># 1390640</i>					
CUSTOMER STANDARD					
DATE	DRAWN	ENGINEER	DATE	PM	SALES ORDER
2/6/18	RDW				
DRAWING NUMBER			REVISION	SHEET	
4' RISER			0	1 OF 1	

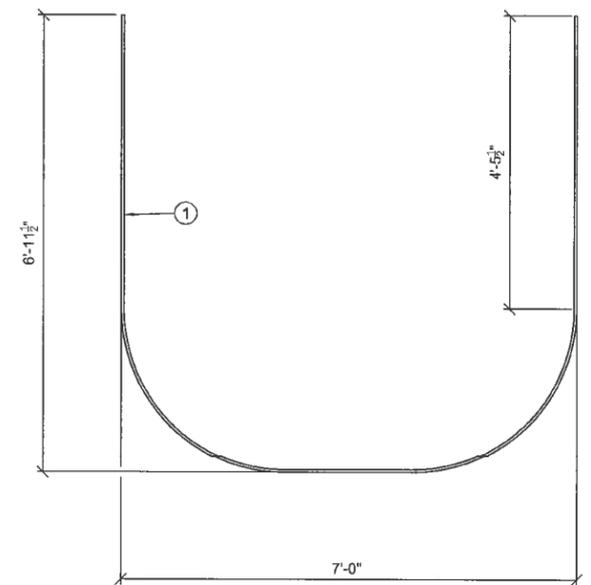
REV	DESCRIPTION	BY	DATE
0	INITIAL RELEASE	RDW	2/22/18



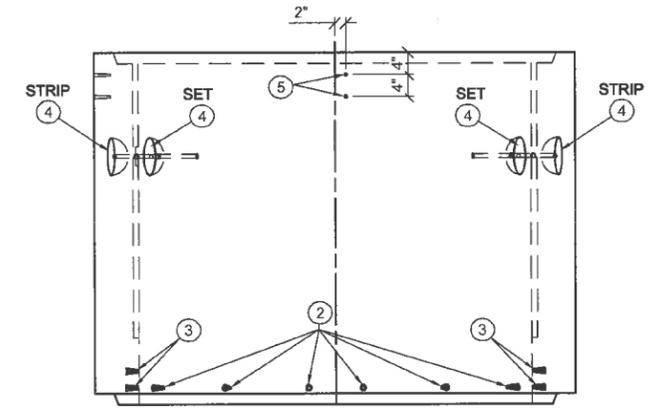
VIEW A-A
SCALE: 3/8" = 1'-0"



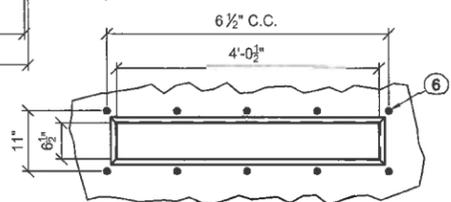
VIEW A-A (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



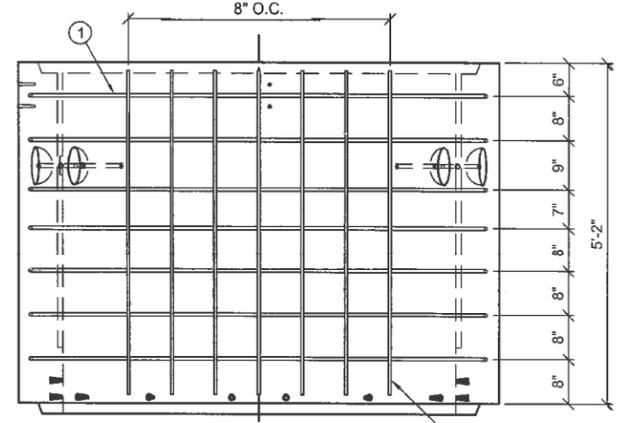
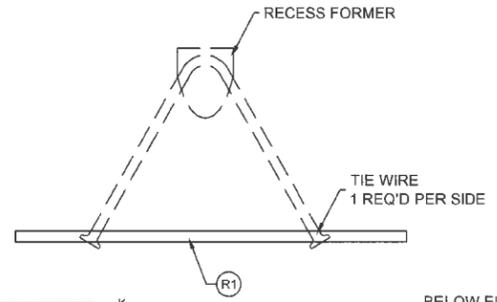
#4 U-BAR DETAIL
SCALE: 3/8" = 1'-0"



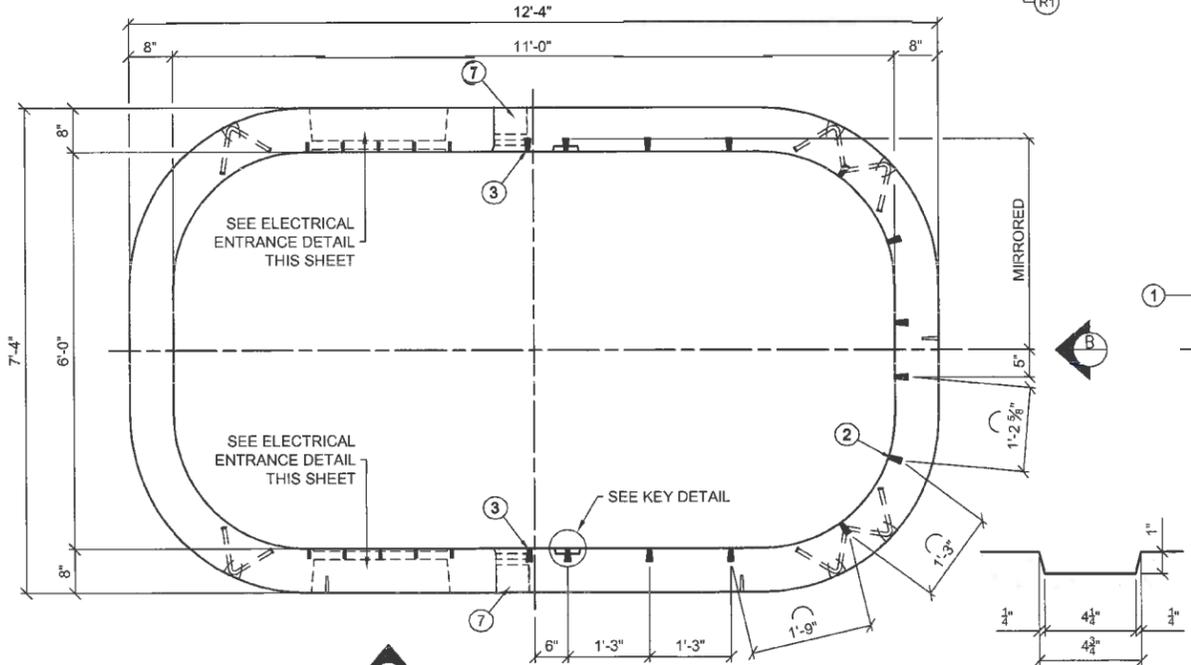
VIEW B-B
SCALE: 3/8" = 1'-0"



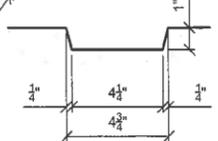
ELECTRICAL ENTRANCE DETAIL
SCALE: N.T.S.



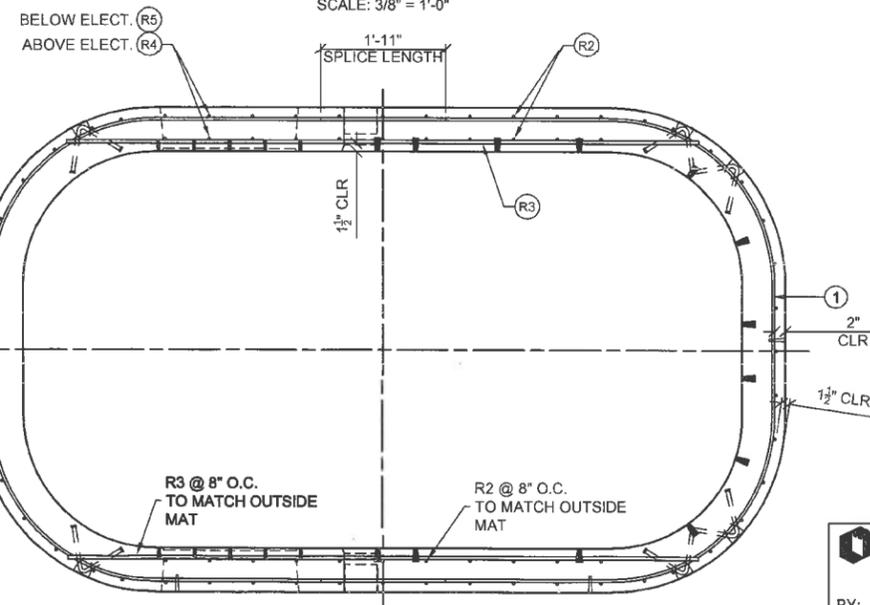
VIEW B-B (OUTSIDE MAT)
SCALE: 3/8" = 1'-0"



PLAN VIEW
SCALE: 3/8" = 1'-0"



KEY DETAIL
SCALE: N.T.S.



PLAN VIEW (REINFORCEMENT)
SCALE: 3/8" = 1'-0"

APPROVED FOR LAYOUT
BY: _____ DATE: _____

APPROVED FOR FABRICATION
BY: FS DATE: 2-22-18

Oldcastle Precast®
411 E. FRYE RD. CHANDLER AZ 85226
PHONE: (480) 883-3878 FAX: (480) 883-2108

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611 VALVE VAULT					
PRODUCTION AND STEEL					
CUSTOMER: STANDARD					
DATE: 2/22/18	DRAWN: RDW	ENGINEER:	DATE:	PM:	SALES ORDER:
DRAWING NUMBER: VALVE VAULT			REVISION: 0	SHEET: 1 OF 1	

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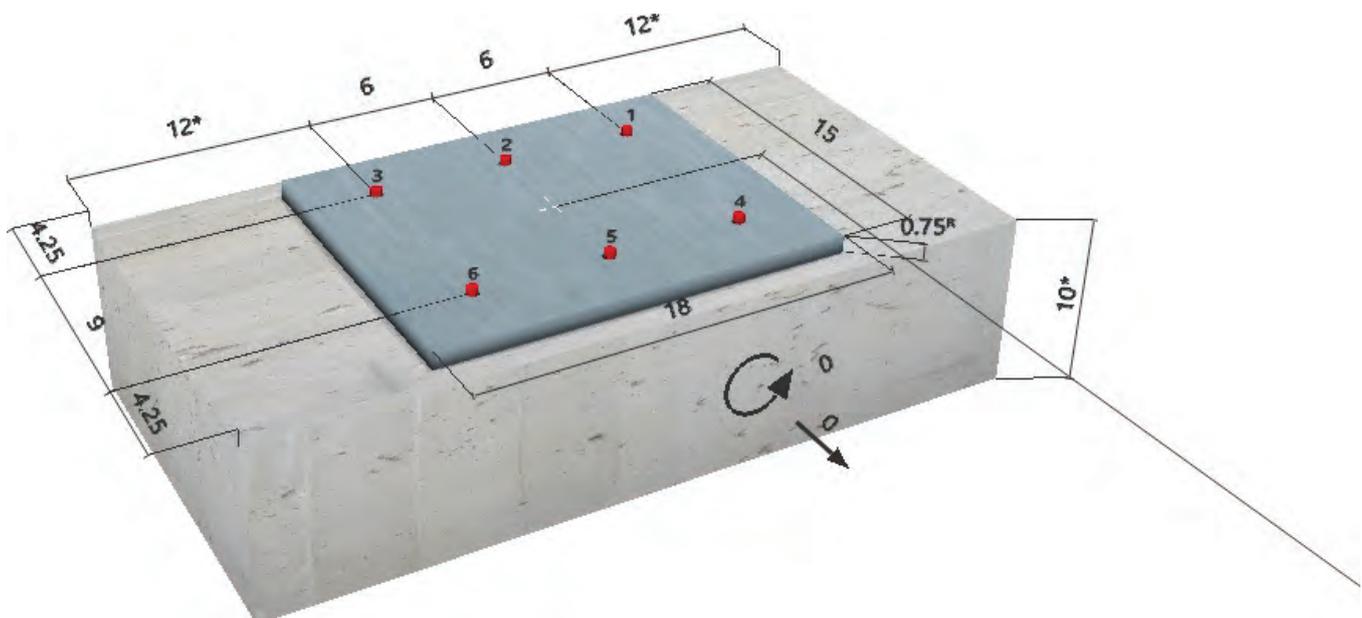
Company: Roberts Engineering PLLC
 Specifier: Chris Roberts
 Address: 17503 NE 137th ST
 Phone | Fax: 425-556-0300 |
 E-Mail: Ron@RobertsEngineering.org

Page: 1
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 Sub-Project | Pos. No.:
 Date: 7/2/2019

Specifier's comments:
1 Input data

Anchor type and diameter:	HIT-RE 500 V3 + HAS-R 316 SS 1/2	
Effective embedment depth:	$h_{ef,act} = 8.500$ in. ($h_{ef,limit} = -$ in.)	
Material:	ASTM F 593	
Evaluation Service Report:	ESR-3814	
Issued Valid:	1/1/2019 1/1/2021	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.	
Anchor plate:	$l_x \times l_y \times t = 15.000$ in. x 18.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 7000, $f_c' = 7,000$ psi; $h = 10.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]


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 Date: 7/2/2019

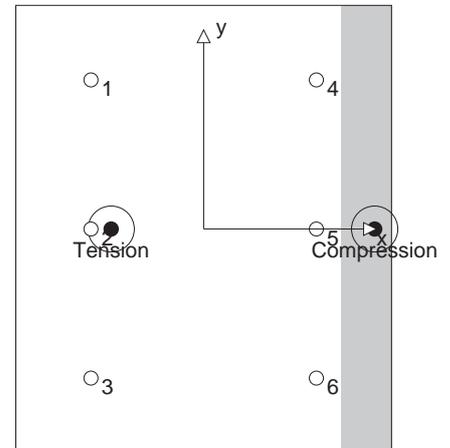
2 Load case/Resulting anchor forces

Load case: Design loads

Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	4,096	0	0	0
2	4,096	0	0	0
3	4,096	0	0	0
4	403	0	0	0
5	403	0	0	0
6	403	0	0	0



max. concrete compressive strain: 0.20 [‰]
 max. concrete compressive stress: 875 [psi]
 resulting tension force in (x/y)=(-3.694/0.000): 13,498 [lb]
 resulting compression force in (x/y)=(6.827/0.000): 15,898 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	4,096	9,223	45	OK
Bond Strength**	13,498	14,050	97	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Strength**	13,498	14,105	96	OK

* anchor having the highest loading **anchor group (anchors in tension)

3.1 Steel Strength

N_{sa} = ESR value refer to ICC-ES ESR-3814
 $\phi N_{sa} \geq N_{ua}$ ACI 318-14 Table 17.3.1.1

Variables

$A_{se,N}$ [in. ²]	f_{uta} [psi]
0.14	100,000

Calculations

N_{sa} [lb]
14,190

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
14,190	0.650	9,223	4,096

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3.2 Bond Strength

$$N_{ag} = \left(\frac{A_{Na}}{A_{Na0}} \right) \Psi_{ec1,Na} \Psi_{ec2,Na} \Psi_{ed,Na} \Psi_{cp,Na} N_{ba} \quad \text{ACI 318-14 Eq. (17.4.5.1.b)}$$

$$\phi N_{ag} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Na} = \text{see ACI 318-14, Section 17.4.5.1, Fig. R 17.4.5.1(b)}$$

$$A_{Na0} = (2 C_{Na})^2 \quad \text{ACI 318-14 Eq. (17.4.5.1c)}$$

$$C_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}} \quad \text{ACI 318-14 Eq. (17.4.5.1d)}$$

$$\Psi_{ec,Na} = \left(\frac{1}{1 + \frac{e_N}{C_{Na}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.3)}$$

$$\Psi_{ed,Na} = 0.7 + 0.3 \left(\frac{C_{a,min}}{C_{Na}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.4b)}$$

$$\Psi_{cp,Na} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{C_{Na}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.5b)}$$

$$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \pi \cdot d_a \cdot h_{ef} \quad \text{ACI 318-14 Eq. (17.4.5.2)}$$

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$C_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2,975	0.500	8.500	4.250	1,482
$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	C_{ac} [in.]	λ_a	
3.694	0.000	28.204	1.000	

Calculations

C_{Na} [in.]	A_{Na} [in. ²]	A_{Na0} [in. ²]	$\Psi_{ed,Na}$
8.186	496.51	268.04	0.856
$\Psi_{ec1,Na}$	$\Psi_{ec2,Na}$	$\Psi_{cp,Na}$	N_{ba} [lb]
0.689	1.000	1.000	19,789

Results

N_{ag} [lb]	ϕ_{bond}	ϕN_{ag} [lb]	N_{ua} [lb]
21,615	0.650	14,050	13,498

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 Date: 7/2/2019

3.3 Concrete Breakout Strength

$$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \quad \text{ACI 318-14 Eq. (17.4.2.1b)}$$

$$\phi N_{cbg} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

A_{Nc} see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{C_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{1.5 h_{ef}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$C_{a,min}$ [in.]	$\Psi_{c,N}$
8.000	3.694	0.000	4.250	1.000
C_{ac} [in.]	k_c	λ_a	f'_c [psi]	
28.204	17	1.000	7,000	

Calculations

A_{Nc} [in. ²]	A_{Nc0} [in. ²]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
630.00	576.00	0.765	1.000	0.806	1.000	32,183

Results

N_{cbg} [lb]	$\phi_{concrete}$	ϕN_{cbg} [lb]	N_{ua} [lb]
21,701	0.650	14,105	13,498

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 E-Mail: Ron@RobertsEngineering.org

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 Date: 7/2/2019

4 Shear load

	Load V_{ua} [lb]	Capacity ϕV_n [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)*	N/A	N/A	N/A	N/A
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* anchor having the highest loading **anchor group (relevant anchors)

5 Warnings

- The anchor design methods in PROFIS Anchor require rigid anchor plates per current regulations (ETAG 001/Annex C, EOTA TR029, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Anchor calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Anchor. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies when supplementary reinforcement is used. The Φ factor is increased for non-steel Design Strengths except Pullout Strength and Pryout strength. Condition B applies when supplementary reinforcement is not used and for Pullout Strength and Pryout Strength. Refer to your local standard.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions
- Checking the transfer of loads into the base material and the shear resistance are required in accordance with ACI 318 or the relevant standard!
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-14, Section 17.8.1.

Fastening meets the design criteria!

6 Installation data

Anchor plate, steel: -

Profile: no profile

Hole diameter in the fixture: $d_f = 0.563$ in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-RE 500 V3 + HAS-R 316 SS 1/2

Installation torque: 360.000 in.lb

Hole diameter in the base material: 0.563 in.

Hole depth in the base material: 8.500 in.

Minimum thickness of the base material: 9.750 in.

6.1 Recommended accessories

Drilling

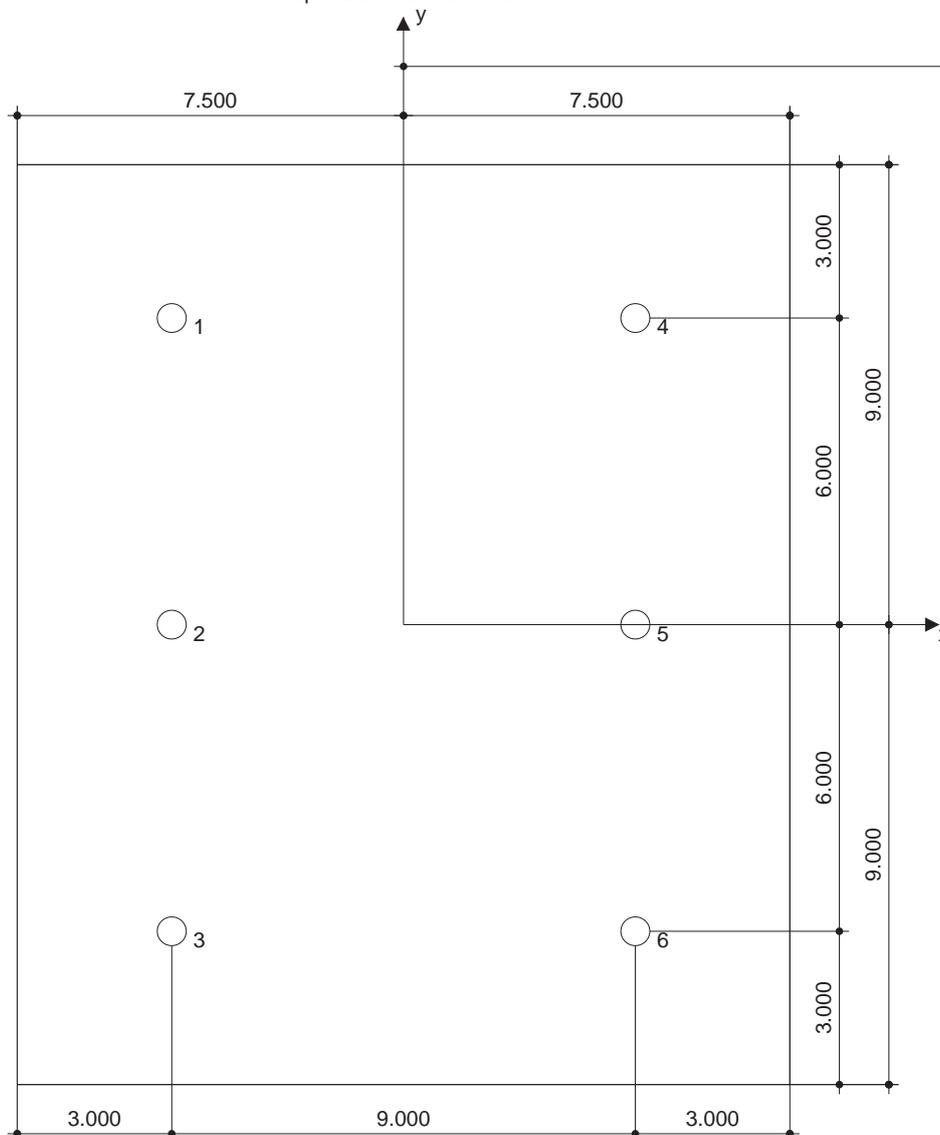
- Suitable Rotary Hammer
- Properly sized drill bit

Cleaning

- Compressed air with required accessories to blow from the bottom of the hole
- Proper diameter wire brush

Setting

- Dispenser including cassette and mixer
- Torque wrench



Coordinates Anchor in.

Anchor	x	y	C-x	C+x	C-y	C+y	Anchor	x	y	C-x	C+x	C-y	C+y
1	-4.500	6.000	4.250	13.250	24.000	12.000	4	4.500	6.000	13.250	4.250	24.000	12.000
2	-4.500	0.000	4.250	13.250	18.000	18.000	5	4.500	0.000	13.250	4.250	18.000	18.000
3	-4.500	-6.000	4.250	13.250	12.000	24.000	6	4.500	-6.000	13.250	4.250	12.000	24.000

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Sub-Project | Pos. No.:
Date: 7/2/2019

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 Specifier: Chris Roberts
 Address: 17503 NE 137th ST
 Phone | Fax: 425-556-0300 |
 E-Mail: Ron@RobertsEngineering.org

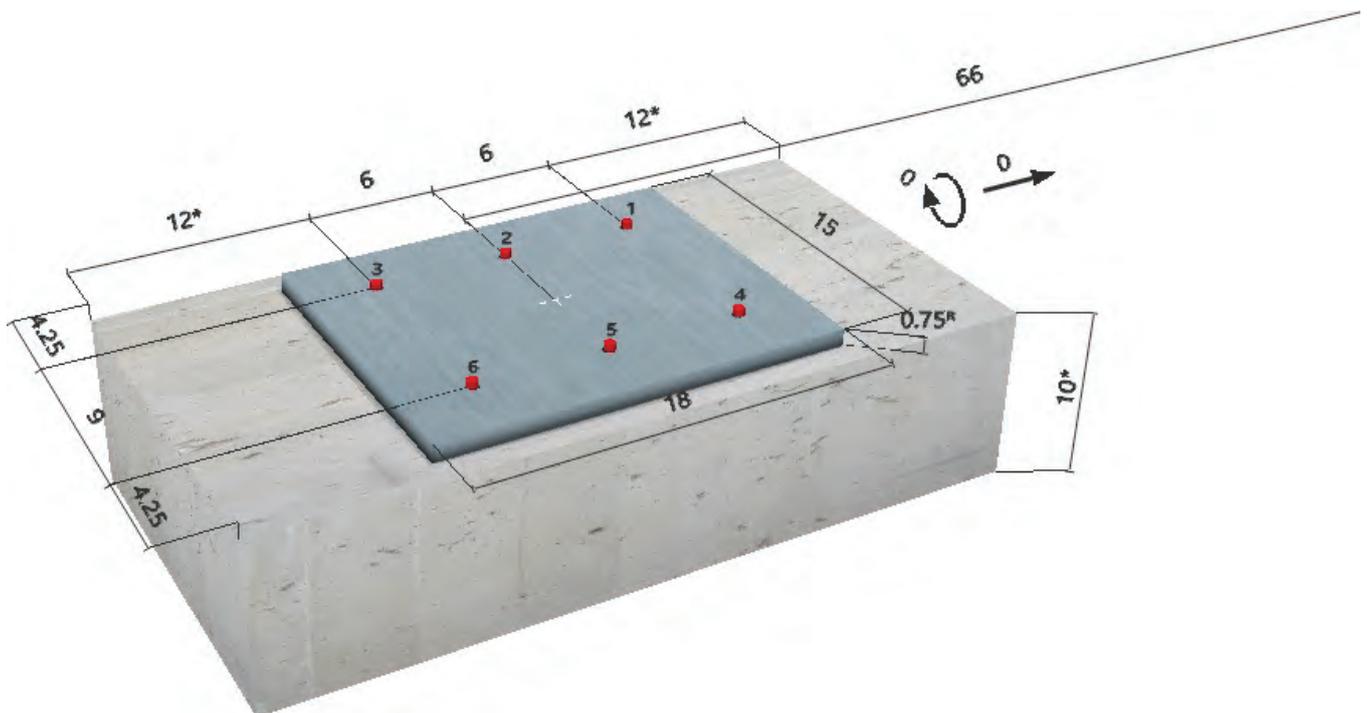
Page: 1
 Project:
 Sub-Project | Pos. No.:
 Date: 7/2/2019

Specifier's comments:

1 Input data

Anchor type and diameter:	HIT-RE 500 V3 + HAS-R 316 SS 1/2	
Effective embedment depth:	$h_{ef,act} = 8.500$ in. ($h_{ef,limit} = -$ in.)	
Material:	ASTM F 593	
Evaluation Service Report:	ESR-3814	
Issued Valid:	1/1/2019 1/1/2021	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.	
Anchor plate:	$l_x \times l_y \times t = 15.000$ in. \times 18.000 in. \times 0.750 in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 7000, $f_c' = 7,000$ psi; $h = 10.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]


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Page: 2
 Project:
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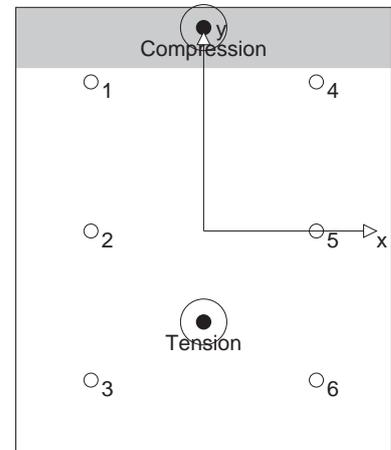
2 Load case/Resulting anchor forces

Load case: Design loads

Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	165	0	0	0
2	1,952	0	0	0
3	3,739	0	0	0
4	165	0	0	0
5	1,952	0	0	0
6	3,739	0	0	0



max. concrete compressive strain: 0.18 [%]
 max. concrete compressive stress: 770 [psi]
 resulting tension force in (x/y)=(0.000/-3.661): 11,713 [lb]
 resulting compression force in (x/y)=(0.000/8.185): 14,113 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	3,739	9,223	41	OK
Bond Strength**	11,713	14,088	84	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Strength**	11,713	14,135	83	OK

* anchor having the highest loading **anchor group (anchors in tension)

3.1 Steel Strength

N_{sa} = ESR value refer to ICC-ES ESR-3814
 $\phi N_{sa} \geq N_{ua}$ ACI 318-14 Table 17.3.1.1

Variables

$A_{se,N}$ [in. ²]	f_{uta} [psi]
0.14	100,000

Calculations

N_{sa} [lb]
14,190

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
14,190	0.650	9,223	3,739

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3.2 Bond Strength

$$N_{ag} = \left(\frac{A_{Na}}{A_{Na0}} \right) \Psi_{ec1,Na} \Psi_{ec2,Na} \Psi_{ed,Na} \Psi_{cp,Na} N_{ba} \quad \text{ACI 318-14 Eq. (17.4.5.1.b)}$$

$$\phi N_{ag} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Na} = \text{see ACI 318-14, Section 17.4.5.1, Fig. R 17.4.5.1(b)}$$

$$A_{Na0} = (2 C_{Na})^2 \quad \text{ACI 318-14 Eq. (17.4.5.1c)}$$

$$C_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}} \quad \text{ACI 318-14 Eq. (17.4.5.1d)}$$

$$\Psi_{ec,Na} = \left(\frac{1}{1 + \frac{e_N}{C_{Na}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.3)}$$

$$\Psi_{ed,Na} = 0.7 + 0.3 \left(\frac{C_{a,min}}{C_{Na}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.4b)}$$

$$\Psi_{cp,Na} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{C_{Na}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.5b)}$$

$$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \pi \cdot d_a \cdot h_{ef} \quad \text{ACI 318-14 Eq. (17.4.5.2)}$$

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$C_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2,975	0.500	8.500	4.250	1,482
$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	C_{ac} [in.]	λ_a	
0.000	3.661	28.204	1.000	

Calculations

C_{Na} [in.]	A_{Na} [in. ²]	A_{Na0} [in. ²]	$\Psi_{ed,Na}$
8.186	496.51	268.04	0.856
$\Psi_{ec1,Na}$	$\Psi_{ec2,Na}$	$\Psi_{cp,Na}$	N_{ba} [lb]
1.000	0.691	1.000	19,789

Results

N_{ag} [lb]	ϕ_{bond}	ϕN_{ag} [lb]	N_{ua} [lb]
21,674	0.650	14,088	11,713

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3.3 Concrete Breakout Strength

$$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \quad \text{ACI 318-14 Eq. (17.4.2.1b)}$$

$$\phi N_{cbg} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

A_{Nc} see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\Psi_{c,N}$
8.000	0.000	3.661	4.250	1.000
c_{ac} [in.]	k_c	λ_a	f'_c [psi]	
28.204	17	1.000	7,000	

Calculations

A_{Nc} [in. ²]	A_{Nc0} [in. ²]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
630.00	576.00	1.000	0.766	0.806	1.000	32,183

Results

N_{cbg} [lb]	$\phi_{concrete}$	ϕN_{cbg} [lb]	N_{ua} [lb]
21,746	0.650	14,135	11,713

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕV_n [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)*	N/A	N/A	N/A	N/A
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* anchor having the highest loading **anchor group (relevant anchors)

5 Warnings

- The anchor design methods in PROFIS Anchor require rigid anchor plates per current regulations (ETAG 001/Annex C, EOTA TR029, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Anchor calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Anchor. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies when supplementary reinforcement is used. The Φ factor is increased for non-steel Design Strengths except Pullout Strength and Pryout strength. Condition B applies when supplementary reinforcement is not used and for Pullout Strength and Pryout Strength. Refer to your local standard.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions
- Checking the transfer of loads into the base material and the shear resistance are required in accordance with ACI 318 or the relevant standard!
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-14, Section 17.8.1.

Fastening meets the design criteria!

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6 Installation data

Anchor plate, steel: -
 Profile: no profile

Hole diameter in the fixture: $d_f = 0.563$ in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-RE 500 V3 + HAS-R 316 SS 1/2

Installation torque: 360.000 in.lb

Hole diameter in the base material: 0.563 in.

Hole depth in the base material: 8.500 in.

Minimum thickness of the base material: 9.750 in.

6.1 Recommended accessories

Drilling

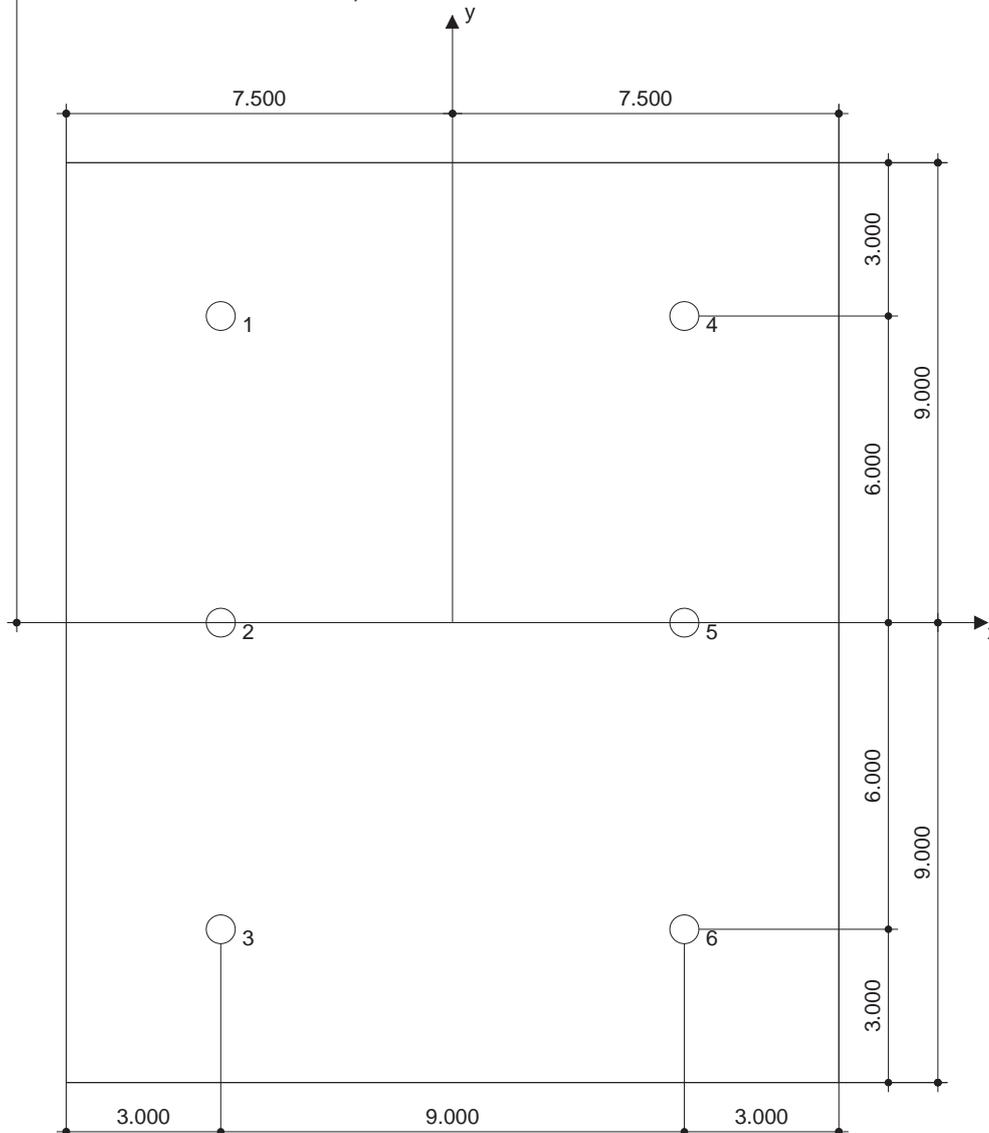
- Suitable Rotary Hammer
- Properly sized drill bit

Cleaning

- Compressed air with required accessories to blow from the bottom of the hole
- Proper diameter wire brush

Setting

- Dispenser including cassette and mixer
- Torque wrench



Coordinates Anchor in.

Anchor	x	y	C-x	C+x	C-y	C+y	Anchor	x	y	C-x	C+x	C-y	C+y
1	-4.500	6.000	4.250	13.250	24.000	12.000	4	4.500	6.000	13.250	4.250	24.000	12.000
2	-4.500	0.000	4.250	13.250	18.000	18.000	5	4.500	0.000	13.250	4.250	18.000	18.000
3	-4.500	-6.000	4.250	13.250	12.000	24.000	6	4.500	-6.000	13.250	4.250	12.000	24.000

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7 Remarks; Your Cooperation Duties

- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

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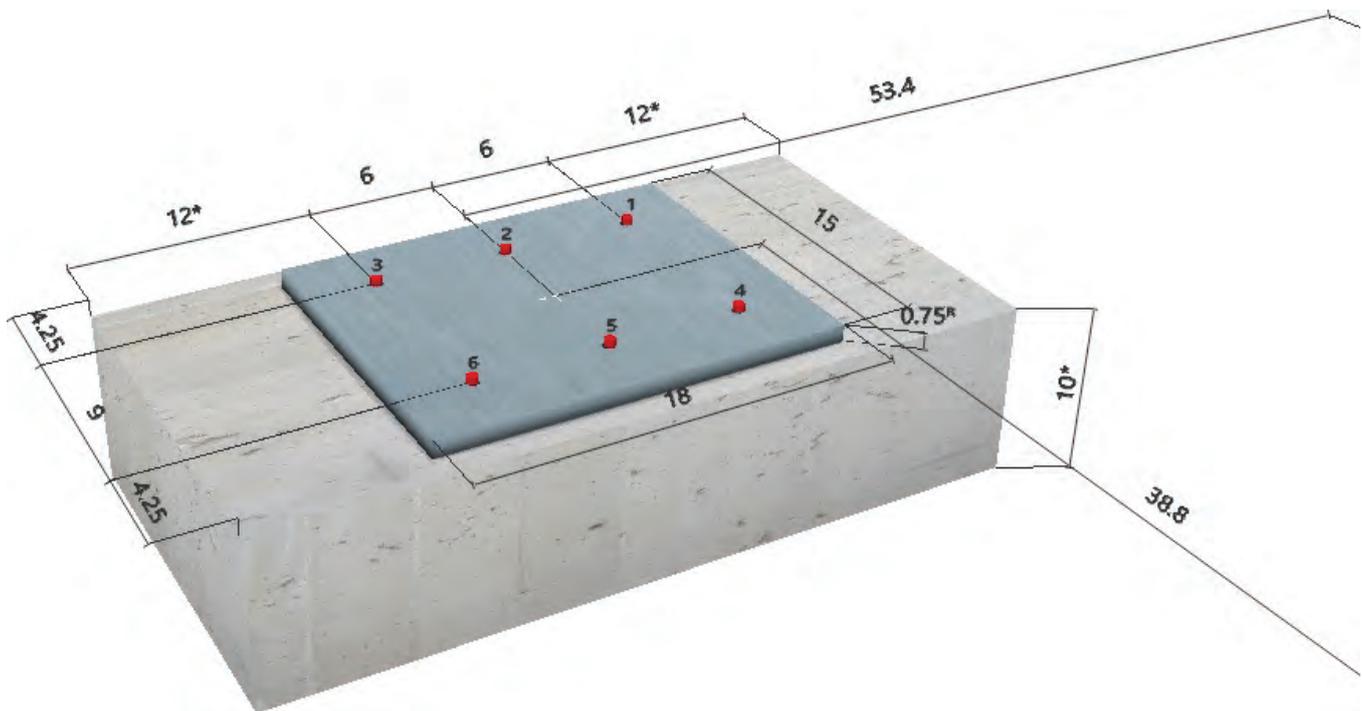
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Specifier's comments:

1 Input data

Anchor type and diameter:	HIT-RE 500 V3 + HAS-R 316 SS 1/2	
Effective embedment depth:	$h_{ef,act} = 8.500$ in. ($h_{ef,limit} = -$ in.)	
Material:	ASTM F 593	
Evaluation Service Report:	ESR-3814	
Issued Valid:	1/1/2019 1/1/2021	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.	
Anchor plate:	$l_x \times l_y \times t = 15.000$ in. x 18.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 7000, $f_c' = 7,000$ psi; $h = 10.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]


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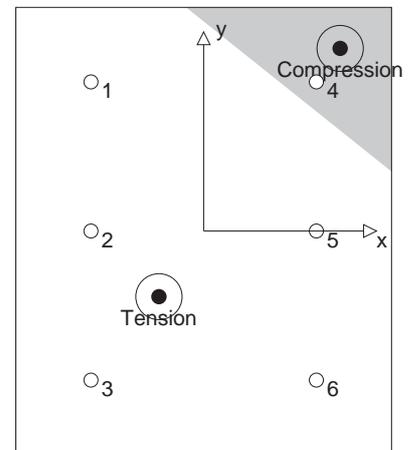
2 Load case/Resulting anchor forces

Load case: Design loads

Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	1,294	0	0	0
2	2,575	0	0	0
3	3,857	0	0	0
4	0	0	0	0
5	1,027	0	0	0
6	2,309	0	0	0



max. concrete compressive strain: 0.34 [%]
 max. concrete compressive stress: 1,491 [psi]
 resulting tension force in (x/y)=(-1.786/-2.642): 11,062 [lb]
 resulting compression force in (x/y)=(5.450/7.349): 13,462 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	3,857	9,223	42	OK
Bond Strength**	11,062	14,686	76	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Strength**	11,062	15,154	74	OK

* anchor having the highest loading **anchor group (anchors in tension)

3.1 Steel Strength

N_{sa} = ESR value refer to ICC-ES ESR-3814
 $\phi N_{sa} \geq N_{ua}$ ACI 318-14 Table 17.3.1.1

Variables

$A_{se,N}$ [in. ²]	f_{uta} [psi]
0.14	100,000

Calculations

N_{sa} [lb]
14,190

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
14,190	0.650	9,223	3,857

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3.2 Bond Strength

$$N_{ag} = \left(\frac{A_{Na}}{A_{Na0}} \right) \Psi_{ec1,Na} \Psi_{ec2,Na} \Psi_{ed,Na} \Psi_{cp,Na} N_{ba} \quad \text{ACI 318-14 Eq. (17.4.5.1.b)}$$

$$\phi N_{ag} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Na} = \text{see ACI 318-14, Section 17.4.5.1, Fig. R 17.4.5.1(b)}$$

$$A_{Na0} = (2 C_{Na})^2 \quad \text{ACI 318-14 Eq. (17.4.5.1c)}$$

$$C_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}} \quad \text{ACI 318-14 Eq. (17.4.5.1d)}$$

$$\Psi_{ec,Na} = \left(\frac{1}{1 + \frac{e_N}{C_{Na}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.3)}$$

$$\Psi_{ed,Na} = 0.7 + 0.3 \left(\frac{C_{a,min}}{C_{Na}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.4b)}$$

$$\Psi_{cp,Na} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{C_{Na}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.5b)}$$

$$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \pi \cdot d_a \cdot h_{ef} \quad \text{ACI 318-14 Eq. (17.4.5.2)}$$

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$C_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2,975	0.500	8.500	4.250	1,482
$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	C_{ac} [in.]	λ_a	
0.886	1.442	28.204	1.000	

Calculations

C_{Na} [in.]	A_{Na} [in. ²]	A_{Na0} [in. ²]	$\Psi_{ed,Na}$
8.186	466.12	268.04	0.856
$\Psi_{ec1,Na}$	$\Psi_{ec2,Na}$	$\Psi_{cp,Na}$	N_{ba} [lb]
0.902	0.850	1.000	19,789

Results

N_{ag} [lb]	ϕ_{bond}	ϕN_{ag} [lb]	N_{ua} [lb]
22,593	0.650	14,686	11,062

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3.3 Concrete Breakout Strength

$$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \quad \text{ACI 318-14 Eq. (17.4.2.1b)}$$

$$\phi N_{cbg} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

A_{Nc} see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{C_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{1.5 h_{ef}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$C_{a,min}$ [in.]	$\Psi_{c,N}$
8.000	0.886	1.442	4.250	1.000
C_{ac} [in.]	k_c	λ_a	f'_c [psi]	
28.204	17	1.000	7,000	

Calculations

A_{Nc} [in. ²]	A_{Nc0} [in. ²]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
622.50	576.00	0.931	0.893	0.806	1.000	32,183

Results

N_{cbg} [lb]	$\phi_{concrete}$	ϕN_{cbg} [lb]	N_{ua} [lb]
23,313	0.650	15,154	11,062

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕV_n [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)*	N/A	N/A	N/A	N/A
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* anchor having the highest loading **anchor group (relevant anchors)

5 Warnings

- The anchor design methods in PROFIS Anchor require rigid anchor plates per current regulations (ETAG 001/Annex C, EOTA TR029, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Anchor calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Anchor. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies when supplementary reinforcement is used. The Φ factor is increased for non-steel Design Strengths except Pullout Strength and Pryout strength. Condition B applies when supplementary reinforcement is not used and for Pullout Strength and Pryout Strength. Refer to your local standard.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions
- Checking the transfer of loads into the base material and the shear resistance are required in accordance with ACI 318 or the relevant standard!
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-14, Section 17.8.1.

Fastening meets the design criteria!

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6 Installation data

Anchor plate, steel: -
 Profile: no profile

Hole diameter in the fixture: $d_f = 0.563$ in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-RE 500 V3 + HAS-R 316 SS 1/2

Installation torque: 360.000 in.lb

Hole diameter in the base material: 0.563 in.

Hole depth in the base material: 8.500 in.

Minimum thickness of the base material: 9.750 in.

6.1 Recommended accessories

Drilling

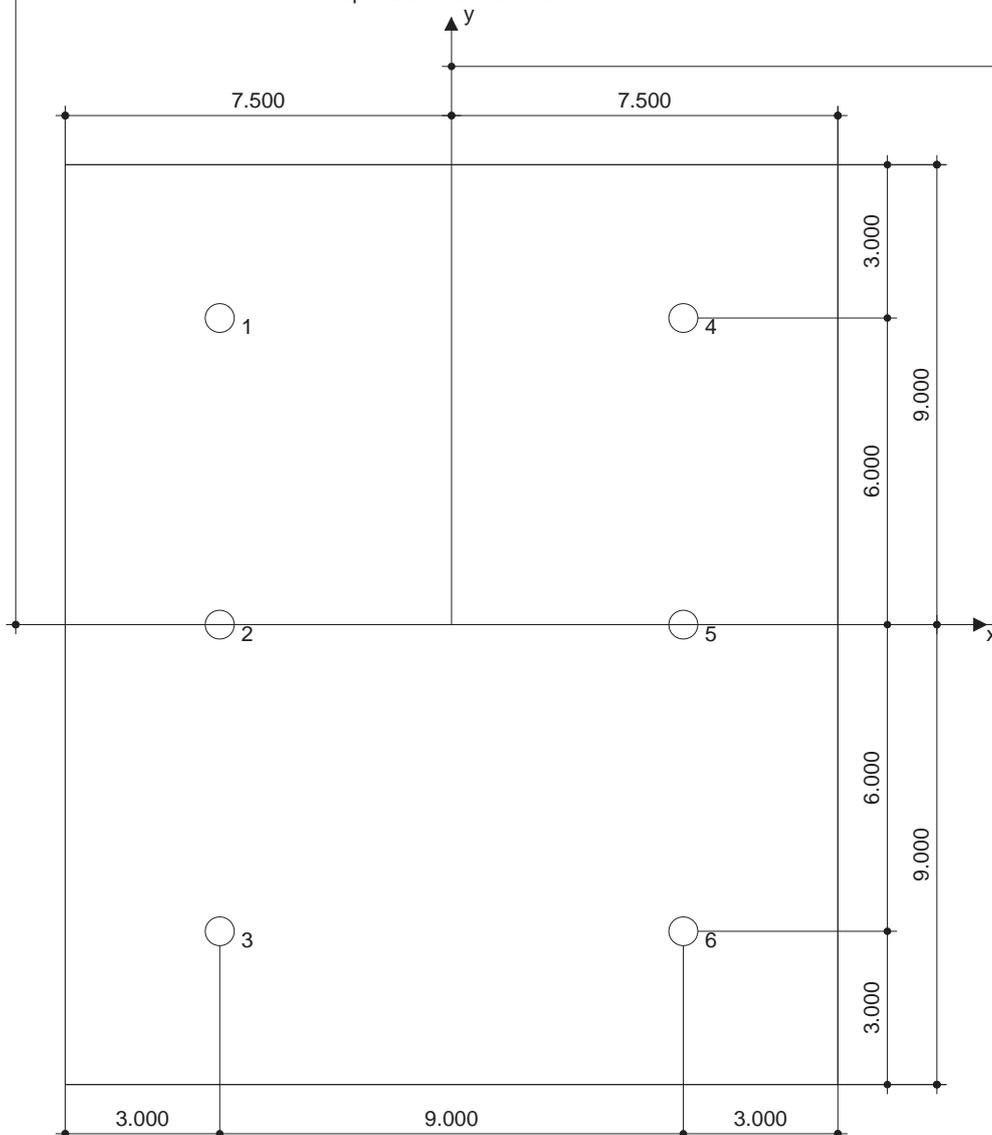
- Suitable Rotary Hammer
- Properly sized drill bit

Cleaning

- Compressed air with required accessories to blow from the bottom of the hole
- Proper diameter wire brush

Setting

- Dispenser including cassette and mixer
- Torque wrench



Coordinates Anchor in.

Anchor	x	y	C-x	C+x	C-y	C+y	Anchor	x	y	C-x	C+x	C-y	C+y
1	-4.500	6.000	4.250	13.250	24.000	12.000	4	4.500	6.000	13.250	4.250	24.000	12.000
2	-4.500	0.000	4.250	13.250	18.000	18.000	5	4.500	0.000	13.250	4.250	18.000	18.000
3	-4.500	-6.000	4.250	13.250	12.000	24.000	6	4.500	-6.000	13.250	4.250	12.000	24.000

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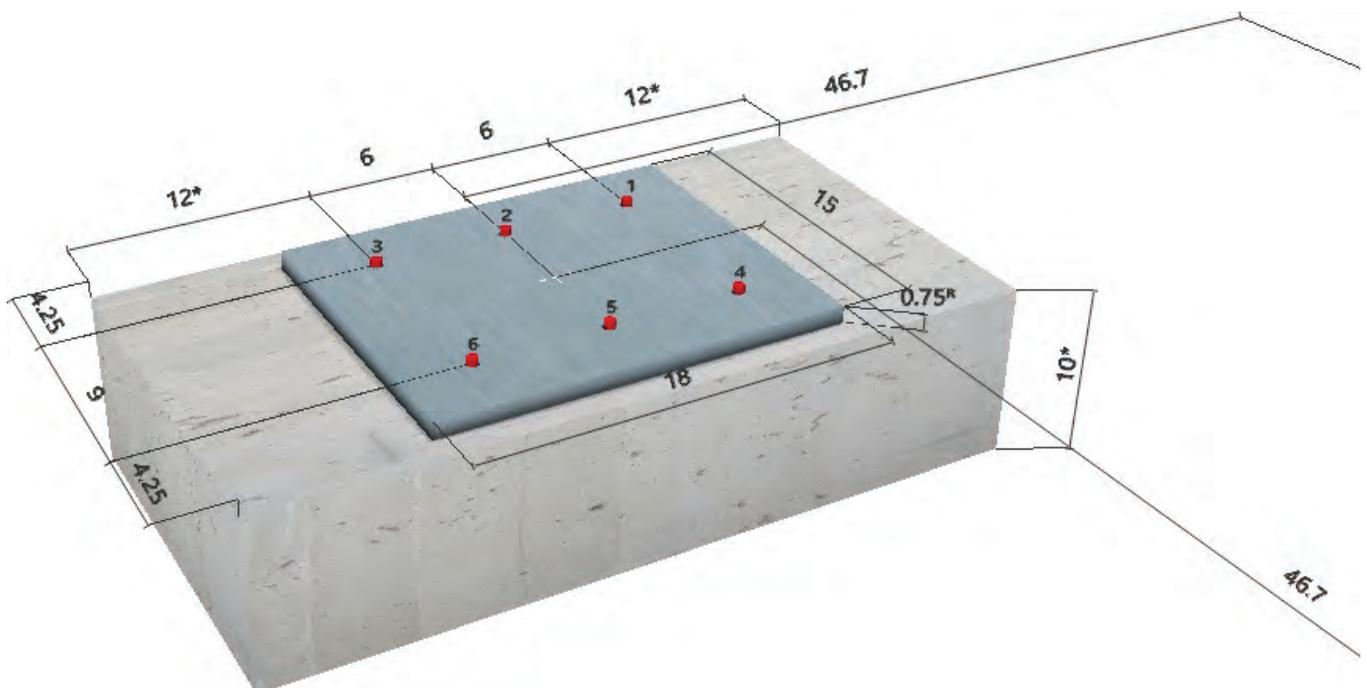
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Specifier's comments:

1 Input data

Anchor type and diameter:	HIT-RE 500 V3 + HAS-R 316 SS 1/2	
Effective embedment depth:	$h_{ef,act} = 8.500$ in. ($h_{ef,limit} = -$ in.)	
Material:	ASTM F 593	
Evaluation Service Report:	ESR-3814	
Issued Valid:	1/1/2019 1/1/2021	
Proof:	Design method ACI 318-14 / Chem	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.	
Anchor plate:	$l_x \times l_y \times t = 15.000$ in. x 18.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 7000, $f'_c = 7,000$ psi; $h = 10.000$ in., Temp. short/long: 32/32 °F	
Installation:	hammer drilled hole, Installation condition: Dry	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar	

^R - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]


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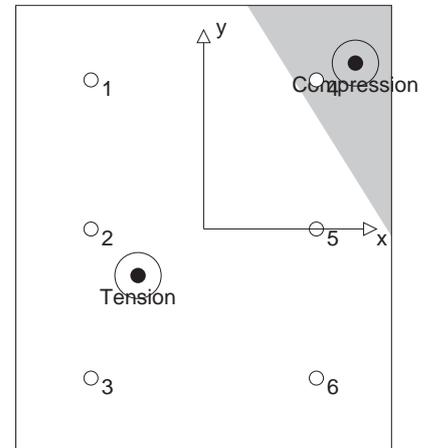
2 Load case/Resulting anchor forces

Load case: Design loads

Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	2,031	0	0	0
2	2,964	0	0	0
3	3,897	0	0	0
4	0	0	0	0
5	707	0	0	0
6	1,640	0	0	0



max. concrete compressive strain: 0.35 [‰]
 max. concrete compressive stress: 1,528 [psi]
 resulting tension force in (x/y)=(-2.621/-1.872): 11,237 [lb]
 resulting compression force in (x/y)=(6.059/6.676): 13,637 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	3,897	9,223	43	OK
Bond Strength**	11,237	14,617	77	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Strength**	11,237	15,097	75	OK

* anchor having the highest loading **anchor group (anchors in tension)

3.1 Steel Strength

N_{sa} = ESR value refer to ICC-ES ESR-3814
 $\phi N_{sa} \geq N_{ua}$ ACI 318-14 Table 17.3.1.1

Variables

$A_{se,N}$ [in. ²]	f_{uta} [psi]
0.14	100,000

Calculations

N_{sa} [lb]
14,190

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
14,190	0.650	9,223	3,897

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3.2 Bond Strength

$$N_{ag} = \left(\frac{A_{Na}}{A_{Na0}} \right) \Psi_{ec1,Na} \Psi_{ec2,Na} \Psi_{ed,Na} \Psi_{cp,Na} N_{ba} \quad \text{ACI 318-14 Eq. (17.4.5.1.b)}$$

$$\phi N_{ag} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Na} = \text{see ACI 318-14, Section 17.4.5.1, Fig. R 17.4.5.1(b)}$$

$$A_{Na0} = (2 C_{Na})^2 \quad \text{ACI 318-14 Eq. (17.4.5.1c)}$$

$$C_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}} \quad \text{ACI 318-14 Eq. (17.4.5.1d)}$$

$$\Psi_{ec,Na} = \left(\frac{1}{1 + \frac{e_N}{C_{Na}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.3)}$$

$$\Psi_{ed,Na} = 0.7 + 0.3 \left(\frac{C_{a,min}}{C_{Na}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.4b)}$$

$$\Psi_{cp,Na} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{C_{Na}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.5.5b)}$$

$$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \pi \cdot d_a \cdot h_{ef} \quad \text{ACI 318-14 Eq. (17.4.5.2)}$$

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$C_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2,975	0.500	8.500	4.250	1,482
$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	C_{ac} [in.]	λ_a	
1.721	0.672	28.204	1.000	

Calculations

C_{Na} [in.]	A_{Na} [in. ²]	A_{Na0} [in. ²]	$\Psi_{ed,Na}$
8.186	466.12	268.04	0.856
$\Psi_{ec1,Na}$	$\Psi_{ec2,Na}$	$\Psi_{cp,Na}$	N_{ba} [lb]
0.826	0.924	1.000	19,789

Results

N_{ag} [lb]	ϕ_{bond}	ϕN_{ag} [lb]	N_{ua} [lb]
22,488	0.650	14,617	11,237

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3.3 Concrete Breakout Strength

$$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \quad \text{ACI 318-14 Eq. (17.4.2.1b)}$$

$$\phi N_{cbg} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

A_{Nc} see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{C_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left(\frac{C_{a,min}}{C_{ac}}, \frac{1.5 h_{ef}}{C_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$C_{a,min}$ [in.]	$\Psi_{c,N}$
8.000	1.721	0.672	4.250	1.000
C_{ac} [in.]	k_c	λ_a	f'_c [psi]	
28.204	17	1.000	7,000	

Calculations

A_{Nc} [in. ²]	A_{Nc0} [in. ²]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
622.50	576.00	0.875	0.947	0.806	1.000	32,183

Results

N_{cbg} [lb]	$\phi_{concrete}$	ϕN_{cbg} [lb]	N_{ua} [lb]
23,225	0.650	15,097	11,237

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕV_n [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)*	N/A	N/A	N/A	N/A
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* anchor having the highest loading **anchor group (relevant anchors)

5 Warnings

- The anchor design methods in PROFIS Anchor require rigid anchor plates per current regulations (ETAG 001/Annex C, EOTA TR029, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Anchor calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Anchor. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies when supplementary reinforcement is used. The Φ factor is increased for non-steel Design Strengths except Pullout Strength and Pryout strength. Condition B applies when supplementary reinforcement is not used and for Pullout Strength and Pryout Strength. Refer to your local standard.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions
- Checking the transfer of loads into the base material and the shear resistance are required in accordance with ACI 318 or the relevant standard!
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-14, Section 17.8.1.

Fastening meets the design criteria!

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6 Installation data

 Anchor plate, steel: -
 Profile: no profile

 Hole diameter in the fixture: $d_f = 0.563$ in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-RE 500 V3 + HAS-R 316 SS 1/2

Installation torque: 360.000 in.lb

Hole diameter in the base material: 0.563 in.

Hole depth in the base material: 8.500 in.

Minimum thickness of the base material: 9.750 in.

6.1 Recommended accessories

Drilling

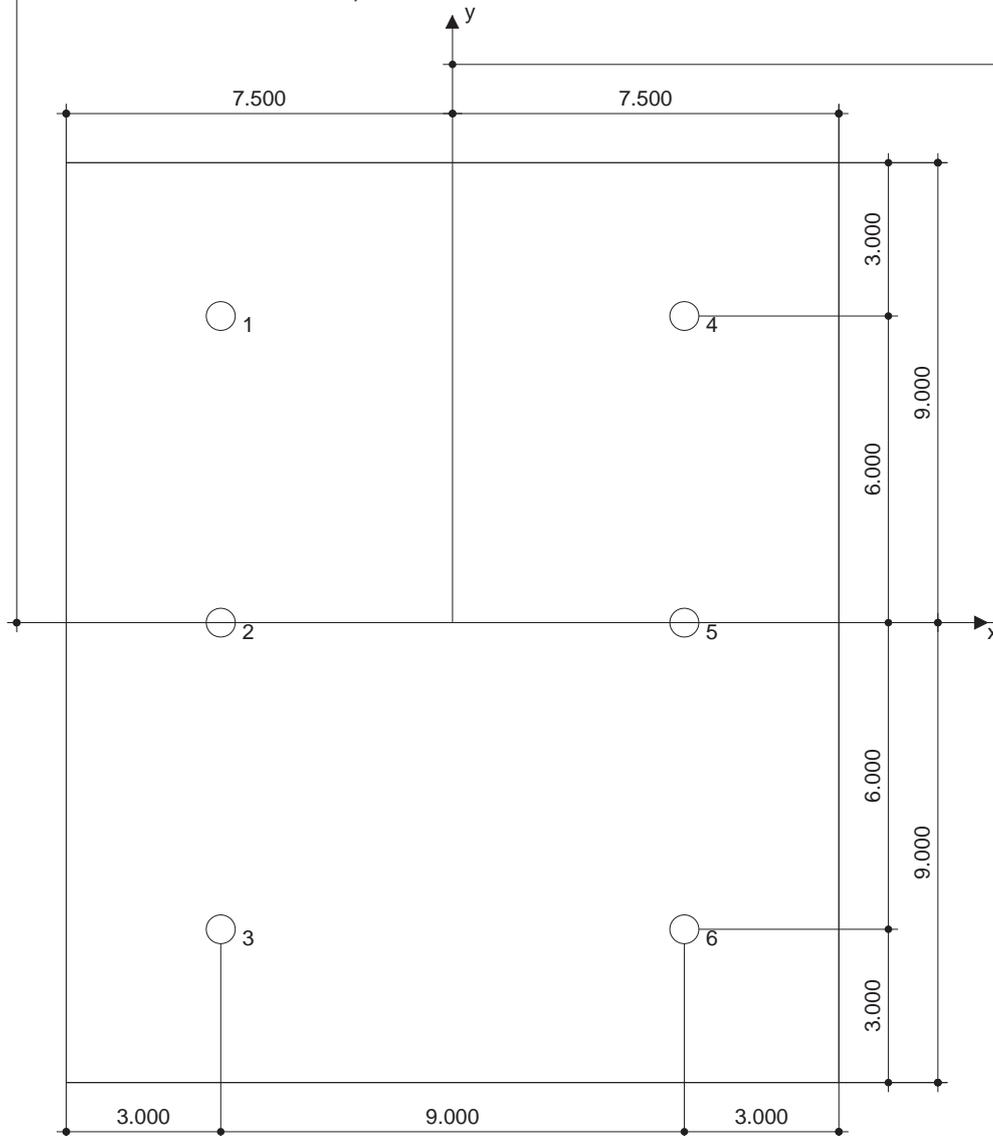
- Suitable Rotary Hammer
- Properly sized drill bit

Cleaning

- Compressed air with required accessories to blow from the bottom of the hole
- Proper diameter wire brush

Setting

- Dispenser including cassette and mixer
- Torque wrench


Coordinates Anchor in.

Anchor	x	y	C-x	C+x	C-y	C+y	Anchor	x	y	C-x	C+x	C-y	C+y
1	-4.500	6.000	4.250	13.250	24.000	12.000	4	4.500	6.000	13.250	4.250	24.000	12.000
2	-4.500	0.000	4.250	13.250	18.000	18.000	5	4.500	0.000	13.250	4.250	18.000	18.000
3	-4.500	-6.000	4.250	13.250	12.000	24.000	6	4.500	-6.000	13.250	4.250	12.000	24.000

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DIVISION: 03 00 00—CONCRETE

SECTION: 03 16 00—CONCRETE ANCHORS

DIVISION: 05 00 00—METALS

SECTION: 05 05 19—POST-INSTALLED CONCRETE ANCHORS

REPORT HOLDER:

HILTI, INC.

EVALUATION SUBJECT:

HILTI HIT-RE 500 V3 ADHESIVE ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE



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DIVISION: 03 00 00—CONCRETE
Section: 03 16 00—Concrete Anchors

DIVISION: 05 00 00—METALS
Section: 05 05 19—Post-installed Concrete Anchors

REPORT HOLDER:

HILTI, INC.

EVALUATION SUBJECT:

HILTI HIT-RE 500 V3 ADHESIVE ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in ADIBC.

For evaluation for compliance with the *National Building Code of Canada*® (NBCC), see listing report [ELC-3814](#).

For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see [ESR-3814 LABC and LARC Supplement](#).

Property evaluated:

Structural

2.0 USES

The Hilti HIT-RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System are used to resist static, wind and earthquake (Seismic Design Categories A through F) tension and shear loads in cracked and uncracked normal-weight concrete having a specified compressive strength, f'_c , of 2,500 psi to 8,500 psi (17.2 MPa to 58.6 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

The anchor system complies with anchors as described in Section 1901.3 of the 2015 IBC, Section 1909 of the 2012 IBC and is an alternative to cast-in-place anchors described in Section 1908 of the 2012 IBC, and Sections 1911 and 1912 of the 2009 and 2006 IBC. The anchor systems may also be used where an engineered design is

submitted in accordance with Section R301.1.3 of the IRC.

The post-installed reinforcing bar system is an alternative to cast-in-place reinforcing bars governed by ACI 318 and IBC Chapter 19.

3.0 DESCRIPTION

3.1 General:

The Hilti HIT-RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System are comprised of the following components:

- Hilti HIT-RE 500 V3 adhesive packaged in foil packs
- Adhesive mixing and dispensing equipment
- Equipment for hole cleaning and adhesive injection

The Hilti HIT-RE 500 V3 Adhesive Anchoring System may be used with continuously threaded rod, Hilti HIS-(R)N internally threaded inserts or deformed steel reinforcing bars as depicted in Figure 4. The Hilti HIT-RE 500 V3 Post-Installed Reinforcing Bar System may only be used with deformed steel reinforcing bars as depicted in Figures 2 and 3. The primary components of the Hilti Adhesive Anchoring and Post-Installed Reinforcing Bar Systems, including the Hilti HIT-RE 500 V3 Adhesive, HIT-RE-M static mixing nozzle and steel anchoring elements, are shown in Figure 6 of this report.

The manufacturer's printed Installation instructions (MPII), as included with each adhesive unit package, are consolidated as Figure 9A and 9B.

3.2 Materials:

3.2.1 Hilti HIT-RE 500 V3 Adhesive: Hilti HIT-RE 500 V3 Adhesive is an injectable, two-component epoxy adhesive. The two components are separated by means of a dual-cylinder foil pack attached to a manifold. The two components combine and react when dispensed through a static mixing nozzle attached to the manifold. Hilti HIT-RE 500 V3 is available in 11.1-ounce (330 ml), 16.9-ounce (500 ml), and 47.3-ounce (1400 ml) foil packs. The manifold attached to each foil pack is stamped with the adhesive expiration date. The shelf life, as indicated by the expiration date, applies to an unopened foil pack stored in a dry, dark environment and in accordance with Figure 9A.

3.2.2 Hole Cleaning Equipment:

3.2.2.1 Standard Equipment: Standard hole cleaning equipment, comprised of steel wire brushes and air nozzles, is described in Figure 9A of this report.

3.2.2.2 Hilti Safe-Set™ System: For the elements described in Sections 3.2.5.1 through 3.2.5.3 and Section

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3.2.6, the Hilti TE-CD or TE-YD hollow carbide drill bit with a carbide drilling head conforming to ANSI B212.15 must be used. When used in conjunction with a Hilti vacuum with a minimum value for the maximum volumetric flow rate of 129 CFM (61 l/s), the Hilti TE-CD or TE-YD drill bit will remove the drilling dust, automatically cleaning the hole. Available sizes for Hilti TE-CD or TE-YD drill bit are shown in Figure 9A.

3.2.3 Hole Preparation Equipment:

3.2.3.1 Hilti Safe-Set™ System: TE-YRT Roughening Tool: For the elements described in Sections 3.2.5.1 through 3.2.5.3 and Tables 9, 12, 17, 20, and 29, the Hilti TE-YRT roughening tool with a carbide roughening head is used for hole preparation in conjunction with holes core drilled with a diamond core bit as illustrated in Figure 5.

3.2.4 Dispensers: Hilti HIT-RE 500 V3 must be dispensed with manual, electric, or pneumatic dispensers provided by Hilti.

3.2.5 Anchor Elements:

3.2.5.1 Threaded Steel Rods: Threaded steel rods must be clean, continuously threaded rods (all-thread) in diameters as described in Tables 6 and 14 and Figure 4 of this report. Steel design information for common grades of threaded rods is provided in Table 2. Carbon steel threaded rods must be furnished with a 0.0002-inch-thick (0.005 mm) zinc electroplated coating complying with ASTM B633 SC 1 or must be hot-dipped galvanized complying with ASTM A153, Class C or D. Stainless steel threaded rods must comply with ASTM F593 or ISO 3506 A4. Threaded steel rods must be straight and free of indentations or other defects along their length. The ends may be stamped with identifying marks and the embedded end may be blunt cut or cut on the bias to a chisel point.

3.2.5.2 Steel Reinforcing Bars for use in Post-Installed Anchor Applications: Steel reinforcing bars are deformed bars as described in Table 3 of this report. Tables 6, 14, and 22 and Figure 4 summarize reinforcing bar size ranges. The embedded portions of reinforcing bars must be straight, and free of mill scale, rust, mud, oil, and other coatings (other than zinc) that may impair the bond with the adhesive. Reinforcing bars must not be bent after installation, except as set forth in ACI 318-14 26.6.3.1(b) or ACI 318-11 7.3.2, as applicable, with the additional condition that the bars must be bent cold, and heating of reinforcing bars to facilitate field bending is not permitted.

3.2.5.3 Hilti HIS-N and HIS-RN Inserts: Hilti HIS-N and HIS-RN inserts have a profile on the external surface and are internally threaded. Mechanical properties for Hilti HIS-N and HIS-RN inserts are provided in Table 4. The inserts are available in diameters and lengths as shown in Table 26 and Figure 4. Hilti HIS-N inserts are produced from carbon steel and furnished with a 0.0002-inch-thick (0.005 mm) zinc electroplated coating complying with ASTM B633 SC 1. The stainless steel Hilti HIS-RN inserts are fabricated from X5CrNiMo17122 K700 steel conforming to DIN 17440. Specifications for common bolt types that may be used in conjunction with Hilti HIS-N and HIS-RN inserts are provided in Table 5. Bolt grade and material type (carbon, stainless) must be matched to the insert. Strength reduction factors, ϕ , corresponding to brittle steel elements must be used for Hilti HIS-N and HIS-RN inserts.

3.2.5.4 Ductility: In accordance with ACI 318-14 2.3 or ACI 318-11 D.1, as applicable, in order for a steel element to be considered ductile, the tested elongation must be at least 14 percent and reduction of area must be at least 30 percent. Steel elements with a tested elongation of less

than 14 percent or a reduction of area of less than 30 percent, or both, are considered brittle. Values for various steel materials are provided in Tables 2, 3, 4, and 5 of this report. Where values are nonconforming or unstated, the steel must be considered brittle.

3.2.6 Steel Reinforcing Bars for Use in Post-Installed Reinforcing Bar Connections:

Steel reinforcing bars used in post-installed reinforcing bar connections are deformed bars (rebar) as depicted in Figures 2 and 3. Tables 31, 32, 33, and Figure 4 summarize reinforcing bar size ranges. The embedded portions of reinforcing bars must be straight, and free of mill scale, rust, mud, oil, and other coatings that may impair the bond with the adhesive. Reinforcing bars must not be bent after installation, except as set forth in ACI 318-14 26.6.3.1(b) or ACI 318-11 7.3.2, as applicable, with the additional condition that the bars must be bent cold, and heating of reinforcing bars to facilitate field bending is not permitted.

3.3 Concrete:

Normal-weight concrete must comply with Sections 1903 and 1905 of the IBC, as applicable. The specified compressive strength of the concrete must be from 2,500 psi to 8,500 psi (17.2 MPa to 58.6 MPa) [minimum 24 MPa required under ADIBC Appendix L, Section 5.1.1].

4.0 DESIGN AND INSTALLATION

4.1 Strength Design of Post-Installed Anchors:

Refer to Table 1 for the design parameters for specific installed elements, and refer to Figure 5 and Section 4.1.4 for a flowchart to determine the applicable design bond strength or pullout strength.

4.1.1 General: The design strength of anchors complying with the 2015 IBC, as well as Section R301.1.3 of the 2015 IRC must be determined in accordance with ACI 318-14 Chapter 17 and this report.

The design strength of anchors under the 2012, 2009 and 2006 IBC, as well as the 2012, 2009 and 2006 IRC must be determined in accordance with ACI 318-11 and this report.

A design example according to the 2015 IBC based on ACI 318-14 is given in Figure 7 of this report.

Design parameters are based on ACI 318-14 for use with the 2015 IBC, and ACI 318-11 for use with the 2012, 2009 and 2006 IBC unless noted otherwise in Sections 4.1.1 through 4.1.11 of this report.

The strength design of anchors must comply with ACI 318-14 17.3.1 or ACI 318-11 D.4.1 as applicable, except as required in ACI 318-14 17.2.3 or ACI 318-11 D.3.3, as applicable.

Design parameters are provided in Table 6A through Table 30. Strength reduction factors, ϕ , as given in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable, must be used for load combinations calculated in accordance with Section 1605.2 of the IBC or ACI 318-14 5.3 or ACI 318-11 9.2, as applicable. Strength reduction factors, ϕ , as given in ACI 318-11 D.4.4 must be used for load combinations calculated in accordance with ACI 318-11 Appendix C.

4.1.2 Static Steel Strength in Tension: The nominal static steel strength of a single anchor in tension, N_{sa} , in accordance with ACI 318-14 17.4.1.2 or ACI 318-11 Section D.5.1.2, as applicable, and the associated strength reduction factors, ϕ , in accordance with ACI 318-14 17.3.3 or ACI 318-11 Section D.4.3, as applicable, are provided in the tables outlined in Table 1 for the anchor element types included in this report.

4.1.3 Static Concrete Breakout Strength in Tension:

The nominal concrete breakout strength of a single anchor or group of anchors in tension, N_{cb} or N_{cbg} , must be calculated in accordance with ACI 318-14 17.4.2 or ACI 318-11 D.5.2, as applicable, with the following addition:

The basic concrete breakout strength of a single anchor in tension, N_b , must be calculated in accordance with ACI 318-14 17.4.2.2 or ACI 318-11 D.5.2.2, as applicable using the values of $K_{c,cr}$, and $K_{c,uncr}$, as described in this report. Where analysis indicates no cracking in accordance with ACI 318-14 17.4.2.6 or ACI 318-11 D.5.2.6, as applicable, N_b must be calculated using $K_{c,uncr}$ and $\Psi_{c,N} = 1.0$. See Table 1. For anchors in lightweight concrete, see ACI 318-14 17.2.6 or ACI 318-11 D.3.6, as applicable. The value of f'_c used for calculation must be limited to 8,000 psi (55 MPa) in accordance with ACI 318-14 17.2.7 or ACI 318-11 D.3.7, as applicable. Additional information for the determination of nominal bond strength in tension is given in Section 4.1.4 of this report.

4.1.4 Static Bond Strength in Tension: The nominal static bond strength of a single adhesive anchor or group of adhesive anchors in tension, N_a or N_{ag} , must be calculated in accordance with ACI 318-14 17.4.5 or ACI 318-11 D.5.5, as applicable. Bond strength values are a function of the concrete compressive strength, whether the concrete is cracked or uncracked, the concrete temperature range, the drilling method, and the installation conditions (dry or water-saturated, etc.). The resulting characteristic bond strength shall be multiplied by the associated strength reduction factor ϕ_{nn} as follows:

DRILLING METHOD	CONCRETE TYPE	PERMISSIBLE INSTALLATION CONDITIONS	BOND STRENGTH	ASSOCIATED STRENGTH REDUCTION FACTOR
Hammer-drill	Cracked and Uncracked	Dry	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_d
		Water-saturated	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_{ws}
		Water-filled hole	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_{wf}
		Underwater application	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_{uw}
Core Drilled with Roughening Tool or Hilti TE-CD or TE-YD Hollow Drill Bit	Cracked and Uncracked	Dry	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_d
		Water-saturated	$\tau_{k,uncr}$ or $\tau_{k,cr}$	ϕ_{ws}
Core Drilled	Uncracked	Dry	$\tau_{k,uncr}$	ϕ_d
		Water-saturated	$\tau_{k,uncr}$	ϕ_{ws}

Figure 5 of this report presents a bond strength design selection flowchart. Strength reduction factors for determination of the bond strength are outlined in Table 1 of this report. Adjustments to the bond strength may also be made for increased concrete compressive strength as noted in the footnotes to the bond strength tables.

4.1.5 Static Steel Strength in Shear: The nominal static strength of a single anchor in shear as governed by the steel, V_{sa} , in accordance with ACI 318-14 17.5.1.2 or ACI 318-11 D.6.1.2, as applicable, and strength reduction factors, ϕ , in accordance with ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable, are given in the tables outlined in Table 1 for the anchor element types included in this report.

4.1.6 Static Concrete Breakout Strength in Shear: The nominal static concrete breakout strength of a single anchor or group of anchors in shear, V_{cb} or V_{cbg} , must be calculated in accordance with ACI 318-14 17.5.2 or ACI 318-11 D.6.2, as applicable, based on information given in the tables outlined in Table 1. The basic concrete breakout strength of a single anchor in shear, V_b , must be calculated in accordance with ACI 318-14 17.5.2.2 or ACI 318-11 D.6.2.2, as applicable, using the values of d given in the tables as outlined in Table 1 for the corresponding anchor steel in lieu of d_a (2015, 2012 and 2009 IBC) and d_o (2006 IBC). In addition, h_{ef} must be substituted for ℓ_e . In no case must ℓ_e exceed $8d$. The value of f'_c must be limited to a maximum of 8,000 psi (55 MPa) in accordance with ACI 318-14 17.2.7 or ACI 318-11 D.3.7, as applicable.

4.1.7 Static Concrete Pryout Strength in Shear: The nominal static pryout strength of a single anchor or group of anchors in shear, V_{cp} or V_{cpg} , must be calculated in accordance with ACI 318-14 17.5.3 or ACI 318-11 D.6.3, as applicable.

4.1.8 Interaction of Tensile and Shear Forces: For designs that include combined tension and shear, the interaction of tension and shear loads must be calculated in accordance with ACI 318-14 17.6 or ACI 318-11 D.7, as applicable.

4.1.9 Minimum Member Thickness, h_{min} , Anchor Spacing, s_{min} and Edge Distance, c_{min} : In lieu of ACI 318-14 17.7.1 and 17.7.3 or ACI 318-11 D.8.1 and D.8.3, as applicable, values of s_{min} and c_{min} described in this report must be observed for anchor design and installation. Likewise, in lieu of ACI 318-14 17.7.5 or ACI 318-11 D.8.5, as applicable, the minimum member thicknesses, h_{min} , described in this report must be observed for anchor design and installation. For adhesive anchors that will remain untorqued, ACI 318-14 17.7.4 or ACI 318-11 D.8.4, as applicable, applies.

For edge distances c_{ai} and anchor spacing s_{ai} , the maximum torque T_{max} shall comply with the following requirements:

REDUCED MAXIMUM INSTALLATION TORQUE $T_{max,red}$ FOR EDGE DISTANCES $c_{ai} < (5 \times d_a)$		
EDGE DISTANCE, c_{ai}	MINIMUM ANCHOR SPACING, s_{ai}	MAXIMUM TORQUE, $T_{max,red}$
$1.75 \text{ in. (45 mm)} \leq c_{ai} < 5 \times d_a$	$5 \times d_a \leq s_{ai} < 16 \text{ in.}$	$0.3 \times T_{max}$
	$s_{ai} \geq 16 \text{ in. (406 mm)}$	$0.5 \times T_{max}$

4.1.10 Critical Edge Distance c_{ac} : In lieu of ACI 318-14 17.7.6 or ACI 318-11 D.8.6, as applicable, c_{ac} must be determined as follows:

$$c_{ac} = h_{ef} \cdot \left(\frac{\tau_{k,uncr}}{1160} \right)^{0.4} \cdot \left[3.1 - 0.7 \frac{h}{h_{ef}} \right] \quad \text{Eq. (4-1)}$$

where $\left[\frac{h}{h_{ef}} \right]$ need not be taken as larger than 2.4: and

$\tau_{k,uncr}$ is the characteristic bond strength in uncracked concrete stated in the tables of this report, whereby $\tau_{k,uncr}$ need not be taken as greater than:

$$\tau_{k,uncr} = \frac{k_{uncr} \sqrt{h_{ef} f'_c}}{\pi \cdot d_a}$$

4.1.11 Design Strength in Seismic Design Categories C, D, E and F: In structures assigned to Seismic Design Category C, D, E or F under the IBC or IRC, the design must be performed according to ACI 318-14 17.2.3 or ACI

318-11 Section D.3.3, as applicable. Modifications to ACI 318-14 17.2.3 shall be applied under Section 1905.1.8 of the 2015 IBC. For the 2012 IBC, Section 1905.1.9 shall be omitted. Modifications to ACI 318 (-08, -05) D.3.3 must be applied under Section 1908.1.9 of the 2009 IBC or Section 1908.1.16 of the 2006 IBC, as applicable.

The nominal steel shear strength, V_{sa} , must be adjusted by $\alpha_{V,seis}$ as given in the tables summarized in Table 1 for the anchor element types included in this report. For tension, the nominal pullout strength $N_{p,cr}$ or bond strength τ_{cr} must be adjusted by $\alpha_{N,seis}$. See Tables 8, 9, 11, 12, 16, 17, 19, 20, 24, 28 and 29.

Modify ACI 318-11 Sections D.3.3.4.2, D.3.3.4.3(d) and D.3.3.5.2 to read as follows:

ACI 318-11 D.3.3.4.2 - Where the tensile component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor tensile force associated with the same load combination, anchors and their attachments shall be designed in accordance with ACI 318-11 D.3.3.4.3. The anchor design tensile strength shall be determined in accordance with ACI 318-11 D.3.3.4.4

Exception:

1. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 shall be deemed to satisfy ACI 318-11 D.3.3.4.3(d).

ACI 318-11 D.3.3.4.3(d) – The anchor or group of anchors shall be designed for the maximum tension obtained from design load combinations that include E, with E increased by Ω_0 . The anchor design tensile strength shall be calculated from ACI 318-11 D.3.3.4.4.

ACI 318-11 D.3.3.5.2 – Where the shear component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor shear force associated with the same load combination, anchors and their attachments shall be designed in accordance with ACI 318-11 D.3.3.5.3. The anchor design shear strength for resisting earthquake forces shall be determined in accordance with ACI 318-11 D.6.

Exceptions:

1. For the calculation of the in-plane shear strength of anchor bolts attaching wood sill plates of bearing or non-bearing walls of light-frame wood structures to foundations or foundation stem walls, the in-plane shear strength in accordance with ACI 318-11 D.6.2 and D.6.3 need not be computed and ACI 318-11 D.3.3.5.3 need not apply provided all of the following are satisfied:

1.1. The allowable in-plane shear strength of the anchor is determined in accordance with AF&PA NDS Table 11E for lateral design values parallel to grain.

1.2. The maximum anchor nominal diameter is $5/8$ inch (16 mm).

1.3. Anchor bolts are embedded into concrete a minimum of 7 inches (178 mm).

1.4. Anchor bolts are located a minimum of $1^{3/4}$ inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate.

1.5. Anchor bolts are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.

1.6. The sill plate is 2-inch or 3-inch nominal thickness.

2. For the calculation of the in-plane shear strength of anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of light-frame construction to foundations or foundation stem walls, the in-plane shear strength in accordance with ACI 318-11 D.6.2 and D.6.3, need not be computed and ACI 318-11 D.3.3.5.3 need not apply provided all of the following are satisfied:

2.1. The maximum anchor nominal diameter is $5/8$ inch (16 mm).

2.2. Anchors are embedded into concrete a minimum of 7 inches (178 mm).

2.3. Anchors are located a minimum of $1^{3/4}$ inches (45 mm) from the edge of the concrete parallel to the length of the track.

2.4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the track.

2.5. The track is 33 to 68 mil designation thickness.

Allowable in-plane shear strength of exempt anchors, parallel to the edge of concrete shall be permitted to be determined in accordance with AISI S100 Section E3.3.1.

3. In light-frame construction, bearing or nonbearing walls, shear strength of concrete anchors less than or equal to 1 inch [25 mm] in diameter attaching a sill plate or track to foundation or foundation stem wall need not satisfy ACI 318-11 D.3.3.5.3(a) through (c) when the design strength of the anchors is determined in accordance with ACI 318-11 D.6.2.1(c).

4.2 Strength Design of Post-Installed Reinforcing Bars:

4.2.1 General: The design of straight post-installed deformed reinforcing bars must be determined in accordance with ACI 318 rules for cast-in place reinforcing bar development and splices and this report.

Examples of typical applications for the use of post-installed reinforcing bars are illustrated in Figures 2 and 3 of this report. A design example in accordance with the 2015 IBC based on ACI 318-14 is given in Figure 8 of this report.

4.2.2 Determination of bar development length l_d : Values of l_d must be determined in accordance with the ACI 318 development and splice length requirements for straight cast-in place reinforcing bars.

Exceptions:

1. For uncoated and zinc-coated (galvanized) post-installed reinforcing bars, the factor Ψ_e shall be taken as 1.0. For all other cases, the requirements in ACI 318-14 25.4.2.4 or ACI 318-11 12.2.4 (b) shall apply.

2. When using alternate methods to calculate the development length (e.g., anchor theory), the applicable factors for post-installed anchors generally apply.

4.2.3 Minimum Member Thickness, h_{min} , Minimum Concrete Cover, $c_{c,min}$, Minimum Concrete Edge Distance, $c_{b,min}$, Minimum Spacing, $s_{b,min}$: For post-installed reinforcing bars, there is no limit on the minimum member thickness. In general, all requirements on concrete cover and spacing applicable to straight cast-in bars designed in accordance with ACI 318 shall be maintained.

For post-installed reinforcing bars installed at embedment depths, h_{ef} , larger than 20d ($h_{ef} > 20d$), the minimum concrete cover shall be as follows:

REBAR SIZE	MINIMUM CONCRETE COVER, $c_{c,min}$
$d_b \leq \text{No. 6 (16 mm)}$	$1^{3/16} \text{ in. (30mm)}$
$\text{No. 6} < d_b \leq \text{No. 10 (16mm} < d_b \leq 32\text{mm)}$	$1^{9/16} \text{ in. (40mm)}$

The following requirements apply for minimum concrete edge and spacing for $h_{ef} > 20d$:

Required minimum edge distance for post-installed reinforcing bars (measured from the center of the bar):

$$c_{b,min} = d_o/2 + c_{c,min}$$

Required minimum center-to-center spacing between post-installed bars:

$$s_{b,min} = d_o + c_{c,min}$$

Required minimum center-to-center spacing from existing (parallel) reinforcing:

$$s_{b,min} = d_b/2 \text{ (existing reinforcing)} + d_o/2 + c_{c,min}$$

All other requirements applicable to straight cast-in place bars designed in accordance with ACI 318 shall be maintained.

4.2.4 Design Strength in Seismic Design Categories C, D, E and F: In structures assigned to Seismic Category C, D, E or F under the IBC or IRC, design of straight post-installed reinforcing bars must take into account the provisions of ACI 318-14 Chapter 18 or ACI 318-11 Chapter 21, as applicable.

4.3 Installation:

Installation parameters are illustrated in Figures 1 and 4. Installation must be in accordance with ACI 318-14 17.8.1 and 17.8.2 or ACI 318-11 D.9.1 and D.9.2, as applicable. Anchor and post-installed reinforcing bar locations must comply with this report and the plans and specifications approved by the code official. Installation of the Hilti HIT-RE 500 V3 Adhesive Anchor and Post-Installed Reinforcing Bar Systems must conform to the manufacturer's printed installation instructions (MPII) included in each unit package consolidated as Figures 9A and 9B of this report. The MPII contains additional requirements for combinations of drill hole depth, diameter, drill bit type, hole preparation, and dispensing tools.

The initial cure time, $t_{cure,ini}$, as noted in Figure 9A of this report, is intended for rebar applications only and is the time where rebar and concrete formwork preparation may continue. Between the initial cure time and the full cure time, $t_{cure,final}$, the adhesive has a limited load bearing capacity. Do not apply a torque or load on the rebar during this time

4.4 Special Inspection:

Periodic special inspection must be performed where required in accordance with Section 1705.1.1 and Table 1705.3 of the 2015 and 2012 IBC, Section 1704.15 and Table 1704.4 of the 2009 IBC, or Section 1704.13 of the 2006 IBC, and this report. The special inspector must be on the jobsite initially during anchor or post-installed reinforcing bar installation to verify anchor or post-installed reinforcing bar type and dimensions, concrete type, concrete compressive strength, adhesive identification and expiration date, hole dimensions, hole cleaning procedures, spacing, edge distances, concrete thickness,

anchor or post-installed reinforcing bar embedment, tightening torque and adherence to the manufacturer's printed installation instructions.

The special inspector must verify the initial installations of each type and size of adhesive anchor or post-installed reinforcing bar by construction personnel on site. Subsequent installations of the same anchor or post-installed reinforcing bar type and size by the same construction personnel are permitted to be performed in the absence of the special inspector. Any change in the anchor or post-installed reinforcing bar product being installed or the personnel performing the installation requires an initial inspection. For ongoing installations over an extended period, the special inspector must make regular inspections to confirm correct handling and installation of the product.

Continuous special inspection of adhesive anchors or post-installed reinforcing bar installed in horizontal or upwardly inclined orientations to resist sustained tension loads shall be performed in accordance with ACI 318-14 17.8.2.4, 26.7.1(h), and 26.13.3.2(c) or ACI 318-11 D.9.2.4, as applicable.

Under the IBC, additional requirements as set forth in Sections 1705, 1706, and 1707 must be observed, where applicable.

5.0 CONDITIONS OF USE

The Hilti HIT-RE 500 V3 Adhesive Anchor System and Post-Installed Reinforcing Bar System described in this report complies with, or is a suitable alternative to what is specified in, the codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** Hilti HIT-RE 500 V3 Adhesive anchors and post-installed reinforcing bars must be installed in accordance with the manufacturer's printed installation instructions (MPII) as included in the adhesive packaging and consolidated as Figures 9A and 9B of this report.
- 5.2** The anchors and post-installed reinforcing bars must be installed in cracked and uncracked normal-weight concrete having a specified compressive strength $f'_c = 2,500 \text{ psi to } 8,500 \text{ psi (17.2 MPa to } 58.6 \text{ MPa)}$ [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].
- 5.3** The values of f'_c used for calculation purposes must not exceed 8,000 psi (55.1 MPa).
- 5.4** The concrete shall have attained its minimum design strength prior to installation of the Hilti HIT-RE 500 V3 adhesive anchors or post-installed reinforcing bars.
- 5.5** Anchors and post-installed reinforcing bars must be installed in concrete base materials in holes drilled using carbide-tipped drill bits manufactured with the range of maximum and minimum drill-tip dimensions specified in ANSI B212.15-1994, or diamond core drill bits, as detailed in Figure 9A. Use of the Hilti TE-YRT Roughening Tool in conjunction with diamond core bits must be as detailed in Figure 9B.
- 5.6** Loads applied to the anchors must be adjusted in accordance with Section 1605.2 of the IBC for strength design.
- 5.7** Hilti HIT-RE 500 V3 adhesive anchors and post-installed reinforcing bars are recognized for use to resist short- and long-term loads, including wind and earthquake, subject to the conditions of this report.

- 5.8** In structures assigned to Seismic Design Category C, D, E or F under the IBC or IRC, anchor strength must be adjusted in accordance with Section 4.1.11 of this report, and post-installed reinforcing bars must comply with section 4.2.4 of this report.
- 5.9** Hilti HIT-RE 500 V3 adhesive anchors and post-installed reinforcing bars are permitted to be installed in concrete that is cracked or that may be expected to crack during the service life of the anchor, subject to the conditions of this report.
- 5.10** Anchor strength design values must be established in accordance with Section 4.1 of this report.
- 5.11** Post-installed reinforcing bar development and splice length is established in accordance with Section 4.2 of this report.
- 5.12** Minimum anchor spacing and edge distance as well as minimum member thickness must comply with the values noted in this report.
- 5.13** Post-installed reinforcing bar spacing, minimum member thickness, and cover distance must be in accordance with the provisions of ACI 318 for cast-in place bars and section 4.2.3 of this report.
- 5.14** Prior to anchor installation, calculations and details demonstrating compliance with this report must be submitted to the code official. The calculations and details must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.15** Anchors and post-installed reinforcing bars are not permitted to support fire-resistive construction. Where not otherwise prohibited by the code, Hilti HIT-RE 500 V3 adhesive anchors and post-installed reinforcing bars are permitted for installation in fire-resistive construction provided that at least one of the following conditions is fulfilled:
- Anchors and post-installed reinforcing bars are used to resist wind or seismic forces only.
 - Anchors and post-installed reinforcing bars that support gravity load-bearing structural elements are within a fire-resistive envelope or a fire-resistive membrane, are protected by approved fire-resistive materials, or have been evaluated for resistance to fire exposure in accordance with recognized standards.
 - Anchors and post-installed reinforcing bars are used to support nonstructural elements.
- 5.16** Since an ICC-ES acceptance criteria for evaluating data to determine the performance of adhesive anchors and post-installed reinforcing bars subjected to fatigue or shock loading is unavailable at this time, the use of these anchors under such conditions is beyond the scope of this report.
- 5.17** Use of zinc-plated carbon steel threaded rods or steel reinforcing bars is limited to dry, interior locations.
- 5.18** Use of hot-dipped galvanized carbon steel and stainless steel rods is permitted for exterior exposure or damp environments.
- 5.19** Steel anchoring materials in contact with preservative-treated and fire-retardant-treated wood must be of zinc-coated carbon steel or stainless steel. The minimum coating weights for zinc-coated steel must comply with ASTM A153.
- 5.20** Periodic special inspection must be provided in accordance with Section 4.4 of this report. Continuous special inspection for anchors and post-installed reinforcing bars installed in horizontal or upwardly inclined orientations to resist sustained tension loads must be provided in accordance with Section 4.4 of this report.
- 5.21** Installation of anchors and post-installed reinforcing bars in horizontal or upwardly inclined orientations to resist sustained tension loads shall be performed by personnel certified by an applicable certification program in accordance with ACI 318-14 17.8.2.2 or 17.8.2.3, or ACI 318-11 D.9.2.2 or D.9.2.3, as applicable.
- 5.22** Hilti HIT-RE 500 V3 adhesive anchors and post-installed reinforcing bars may be used to resist tension and shear forces in floor, wall, and overhead installations only if installation is into concrete with a temperature between 23°F and 104°F (-5°C and 40°C) for threaded rods, rebar, and Hilti HIS-(R)N inserts. Overhead installations for hole diameters larger than $\frac{7}{16}$ -inch or 10mm require the use of piston plugs (HIT-SZ, -IP) during injection to the back of the hole. $\frac{7}{16}$ -inch or 10mm diameter holes may be injected directly to the back of the hole with the use of extension tubing on the end of the nozzle. The anchor or post-installed reinforcing bars must be supported until fully cured (i.e., with Hilti HIT-OHW wedges, or other suitable means). Where temporary restraint devices are used, their use shall not result in impairment of the anchor shear resistance. Installations in concrete temperatures below 41°F (5°C) require the adhesive to be conditioned to a minimum temperature of 41°F (5°C).
- 5.23** Anchors and post-installed reinforcing bars shall not be used for applications where the concrete temperature can rise from 40°F or less to 80°F or higher within a 12-hour period. Such applications may include but are not limited to anchorage of building façade systems and other applications subject to direct sun exposure.
- 5.24** Hilti HIT-RE 500 V3 adhesives are manufactured by Hilti GmbH, Kaufering, Germany, under a quality-control program with inspections by ICC-ES.
- 5.25** Hilti HIS-N and HIS-RN inserts are manufactured by Hilti (China) Ltd., Guangdong, China, under a quality-control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

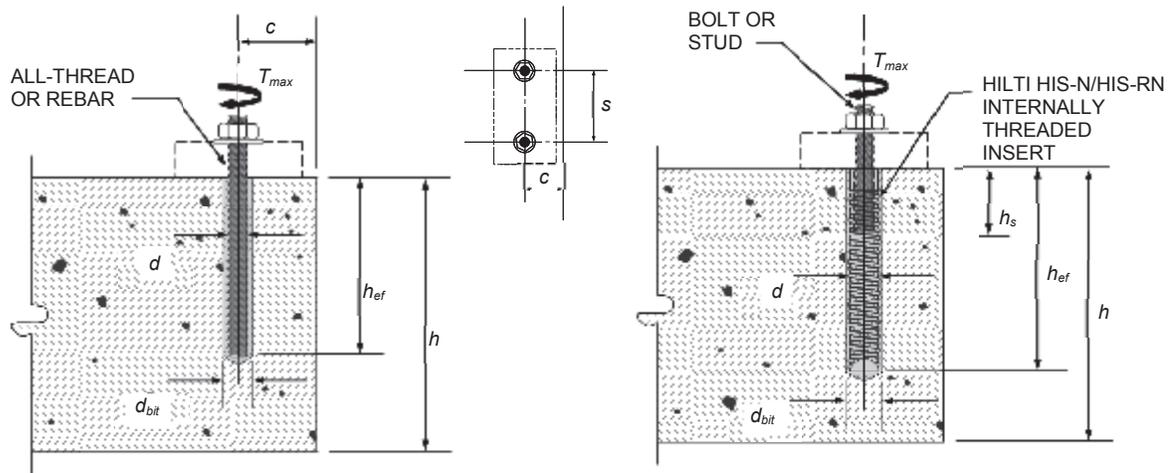
Data in accordance with the ICC-ES Acceptance Criteria for Post-installed Adhesive Anchors in Concrete (AC308), dated October 2016, which incorporates requirements in ACI 355.4-11, including but not limited to tests under freeze/thaw conditions (Table 3.2, test series 6), and Table 3.8 for evaluating post-installed reinforcing bars.

7.0 IDENTIFICATION

- 7.1** Hilti HIT-RE 500 V3 adhesive is identified by packaging labeled with the manufacturer's name (Hilti Corp.) and address, product name, lot number, expiration date, and evaluation report number (ESR-3814).
- 7.2** Hilti HIS-N and HIS-RN inserts are identified by packaging labeled with the manufacturer's name (Hilti Corp.) and address, anchor name and size, and evaluation report number (ESR-3814).

- 7.3 Threaded rods, nuts, washers, bolts, cap screws, and deformed reinforcing bars are standard elements and must conform to applicable national or international specifications.
- 7.4 The report holder's contact information is the following:

HILTI, INC.
 7250 DALLAS PARKWAY, SUITE 1000
 PLANO, TEXAS 75024
 (800) 879-8000
www.us.hilti.com
HiltiTechEng@us.hilti.com



THREADED ROD/REINFORCING BAR

HIS-N AND HIS-RN INSERTS

FIGURE 1—INSTALLATION PARAMETERS FOR POST-INSTALLED ADHESIVE ANCHORS

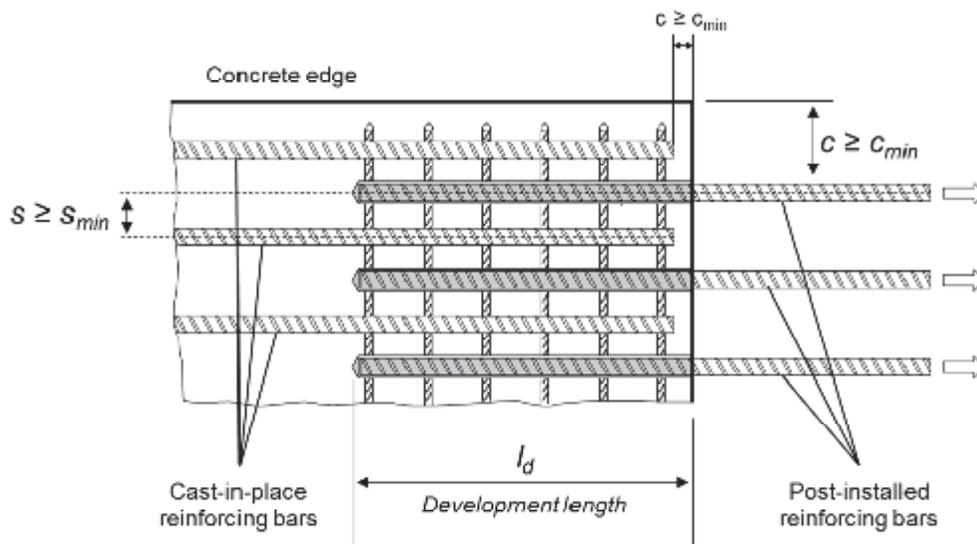


FIGURE 2—INSTALLATION PARAMETERS FOR POST-INSTALLED REINFORCING BARS

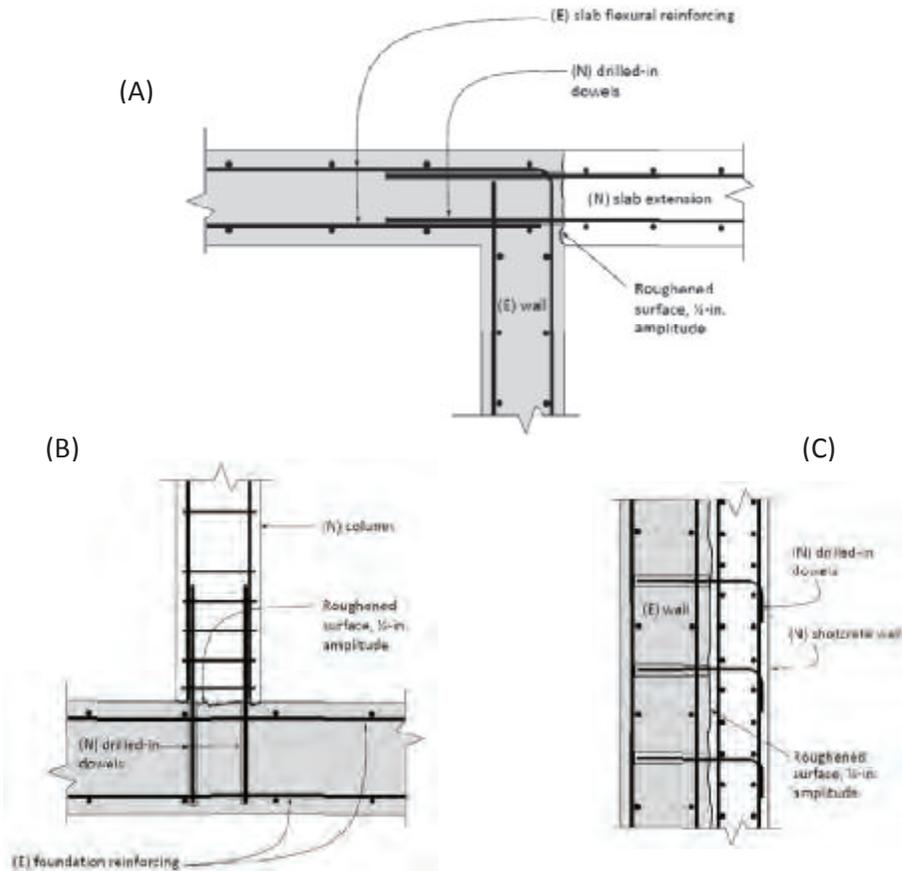


FIGURE 3—(A) TENSION LAP SPLICE WITH EXISTING FLEXURAL REINFORCEMENT; (B) TENSION DEVELOPMENT OF COLUMN DOWELS; (C) DEVELOPMENT OF SHEAR DOWELS FOR NEW ONLAY SHEAR WALL

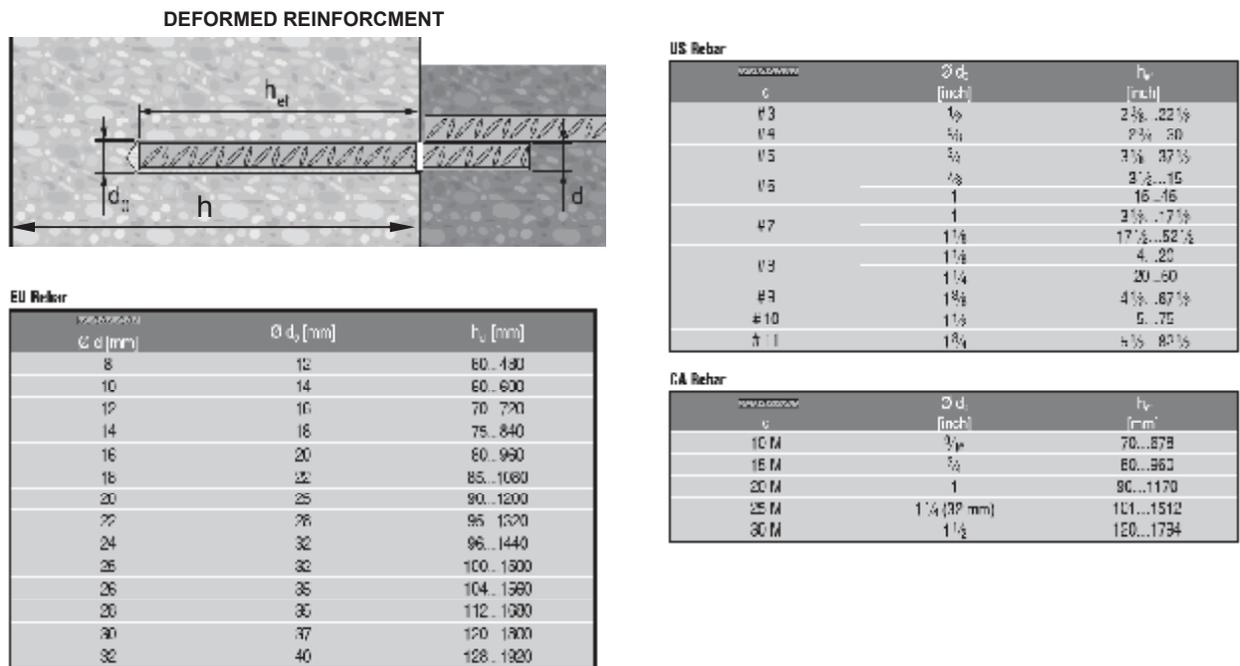


FIGURE 4—INSTALLATION PARAMETERS

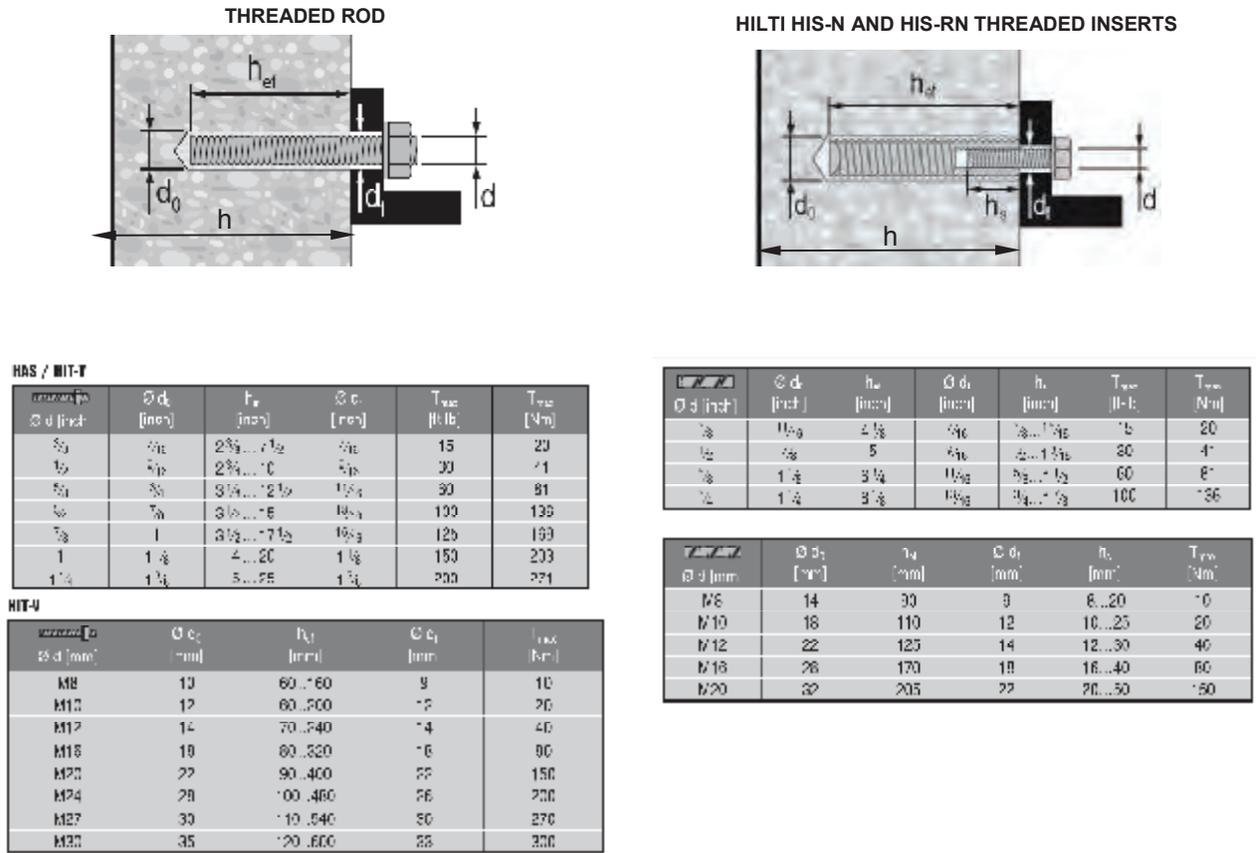


FIGURE 4—INSTALLATION PARAMETERS (Continued)

TABLE 1—DESIGN TABLE INDEX

Design Table		Fractional		Metric			
		Table	Page	Table	Page		
	Steel Strength - N_{sa} , V_{sa}	6A	13	14	20		
	Concrete Breakout - N_{cb} , N_{cbg} , V_{cb} , V_{cbg} , V_{cp} , V_{cpq}	7	15	15	21		
	Bond Strength - N_a , N_{ag}	11-13	18-19	19-21	25-26		
	Steel Strength - N_{sa} , V_{sa}	26	30	26	30		
	Concrete Breakout - N_{cb} , N_{cbg} , V_{cb} , V_{cbg} , V_{cp} , V_{cpq}	27	31	27	31		
	Bond Strength - N_a , N_{ag}	28-30	32-33	28-30	32-33		
Design Table		Fractional		EU Metric		Canadian	
		Table	Page	Table	Page	Table	Page
	Steel Strength - N_{sa} , V_{sa}	6B	14	14	20	22	27
	Concrete Breakout - N_{cb} , N_{cbg} , V_{cb} , V_{cbg} , V_{cp} , V_{cpq}	7	15	15	21	23	27
	Bond Strength - N_a , N_{ag}	8-10	16-17	16-18	22-24	24-25B	28-29
	Determination of development length for post-installed reinforcing bar connections	31	34	32	34	33	35

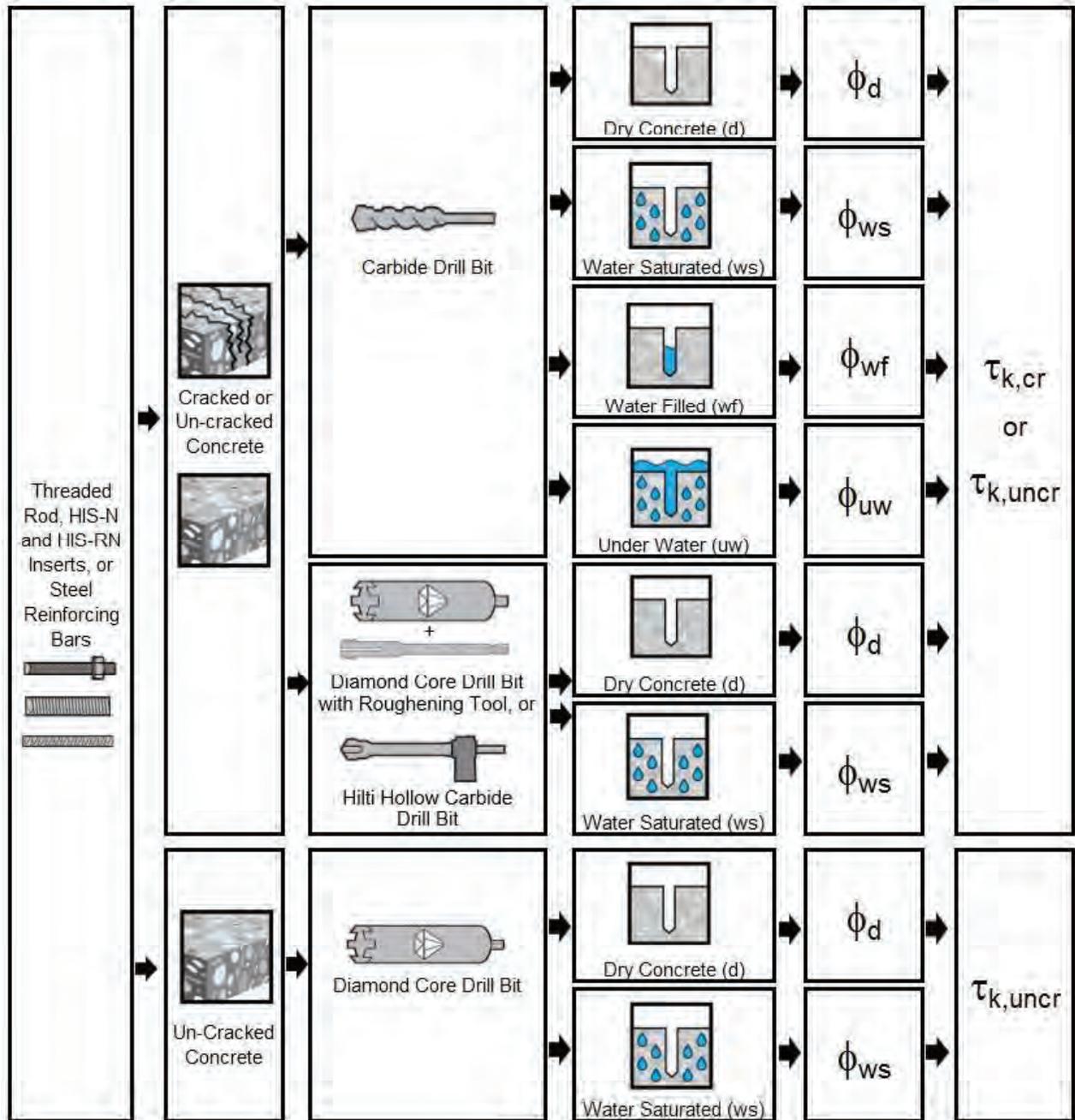


FIGURE 5—FLOWCHART FOR THE ESTABLISHMENT OF DESIGN BOND STRENGTH

TABLE 2—SPECIFICATIONS AND PHYSICAL PROPERTIES OF COMMON CARBON AND STAINLESS STEEL THREADED ROD MATERIALS¹

THREADED ROD SPECIFICATION			Minimum specified ultimate strength, f_{uta}	Minimum specified yield strength 0.2 percent offset, f_{ya}	f_{uta}/f_{ya}	Elongation, min. percent ⁷	Reduction of Area, min. percent	Specification for nuts ⁸
								
CARBON STEEL	ASTM A193 ² Grade B7 ≤ 2 1/2 in. (≤ 64 mm)	psi (MPa)	125,000 (862)	105,000 (724)	1.19	16	50	ASTM A563 Grade DH
	ASTM F568M ³ Class 5.8 M5 (1/4 in.) to M24 (1 in.) (equivalent to ISO 898-1)	psi (MPa)	72,500 (500)	58,000 (400)	1.25	10	35	ASTM A563 Grade DH ⁹ DIN 934 (8-A2K)
	ASTM F1554, Grade 36 ⁷	psi (MPa)	58,000 (400)	36,000 (248)	1.61	23	40	ASTM A194 or ASTM A563
	ASTM F1554, Grade 55 ⁷	psi (MPa)	75,000 (517)	55,000 (379)	1.36	21	30	ASTM A194 or ASTM A563
	ASTM F1554, Grade 105 ⁷	psi (MPa)	125,000 (862)	105,000 (724)	1.19	15	45	ASTM A194 or ASTM A563
	ISO 898-1 ⁴ Class 5.8	MPa (psi)	500 (72,500)	400 (58,000)	1.25	22	-	DIN 934 Grade 6
	ISO 898-1 ⁴ Class 8.8	MPa (psi)	800 (116,000)	640 (92,800)	1.25	12	52	DIN 934 Grade 8
STAINLESS STEEL	ASTM F593 ⁵ CW1 (316) 1/4-in. to 5/8-in.	psi (MPa)	100,000 (689)	65,000 (448)	1.54	20	-	ASTM F594
	ASTM F593 ⁵ CW2 (316) 3/4-in. to 1 1/2-in.	psi (MPa)	85,000 (586)	45,000 (310)	1.89	25	-	ASTM F594
	ASTM A193 Grade 8(M), Class 1 ² - 1 1/4-in.	psi (MPa)	75,000 (517)	30,000 (207)	2.50	30	50	ASTM F594
	ISO 3506-1 ⁶ A4-70 M8 – M24	MPa (psi)	700 (101,500)	450 (65,250)	1.56	40	-	ISO 4032
	ISO 3506-1 ⁶ A4-50 M27 – M30	MPa (psi)	500 (72,500)	210 (30,450)	2.38	40	-	ISO 4032

¹Hilti HIT-RE 500 V3 adhesive may be used in conjunction with all grades of continuously threaded carbon or stainless steel rod (all-thread) that comply with the code reference standards and that have thread characteristics comparable with ANSI B1.1 UNC Coarse Thread Series or ANSI B1.13M M Profile Metric Thread Series. Values for threaded rod types and associated nuts supplied by Hilti are provided here.

²Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

³Standard Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners

⁴Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs

⁵Standard Steel Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs

⁶Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs

⁷Based on 2-in. (50 mm) gauge length except for A 193, which are based on a gauge length of 4d and ISO 898, which is based on 5d.

⁸Nuts of other grades and styles having specified proof load stresses greater than the specified grade and style are also suitable. Nuts must have specified proof load stresses equal to or greater than the minimum tensile strength of the specified threaded rod.

⁹Nuts for fractional rods.

TABLE 3—SPECIFICATIONS AND PHYSICAL PROPERTIES OF COMMON STEEL REINFORCING BARS

REINFORCING BAR SPECIFICATION		Minimum specified ultimate strength, f_{uta}	Minimum specified yield strength, f_{ya}
			
ASTM A615 ¹ Gr. 60	psi (MPa)	90,000 (620)	60,000 (414)
ASTM A615 ¹ Gr. 40	psi (MPa)	60,000 (414)	40,000 (276)
ASTM A706 ² Gr. 60	psi (MPa)	80,000 (550)	60,000 (414)
DIN 488 ³ BSt 500	MPa (psi)	550 (79,750)	500 (72,500)
CAN/CSA-G30.18 ⁴ Gr. 400	MPa (psi)	540 (78,300)	400 (58,000)

¹Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement

²Standard Specification for Low Alloy Steel Deformed and Plain Bars for Concrete Reinforcement

³Reinforcing steel; reinforcing steel bars; dimensions and masses

⁴Billet-Steel Bars for Concrete Reinforcement

TABLE 4—SPECIFICATIONS AND PHYSICAL PROPERTIES OF FRACTIONAL AND METRIC HIS-N AND HIS-RN INSERTS

HILTI HIS-N AND HIS-RN INSERTS		Minimum specified ultimate strength, f_{uta}	Minimum specified yield strength, f_{ya}
 Carbon Steel DIN EN 10277-3 11SMnPb30+c or DIN 1561 9SMnPb28K	psi	71,050	56,550
	(MPa)	(490)	(390)
Stainless Steel EN 10088-3 X5CrNiMo 17-12-2	psi	101,500	50,750
	(MPa)	(700)	(350)

TABLE 5—SPECIFICATIONS AND PHYSICAL PROPERTIES OF COMMON BOLTS, CAP SCREWS AND STUDS FOR USE WITH HIS-N AND HIS-RN INSERTS^{1,2}

BOLT, CAP SCREW OR STUD SPECIFICATION		Minimum specified ultimate strength f_{uta}	Minimum specified yield strength 0.2 percent offset f_{ya}	f_{uta}/f_{ya}	Elongation, min.	Reduction of Area, min.	Specification for nuts ⁶
 ASTM A193 Grade B7	psi	125,000	105,000	1.119	16	50	ASTM A563 Grade DH
	(MPa)	(862)	(724)				
SAE J429 ³ Grade 5	psi	120,000	92,000	1.30	14	35	SAE J995
	(MPa)	(828)	(634)				
ASTM A325 ⁴ 1/2 to 1-in.	psi	120,000	92,000	1.30	14	35	A563 C, C3, D, DH, DH3 Heavy Hex
	(MPa)	(828)	(634)				
ASTM A193 ⁵ Grade B8M (AISI 316) for use with HIS-RN	psi	110,000	95,000	1.16	15	45	ASTM F594 ⁷ Alloy Group 1, 2 or 3
	(MPa)	(759)	(655)				
ASTM A193 ⁵ Grade B8T (AISI 321) for use with HIS-RN	psi	125,000	100,000	1.25	12	35	ASTM F594 ⁷ Alloy Group 1, 2 or 3
	(MPa)	(862)	(690)				

¹ Minimum Grade 5 bolts, cap screws or studs must be used with carbon steel HIS inserts.

² Only stainless steel bolts, cap screws or studs must be used with HIS-RN inserts.

³ Mechanical and Material Requirements for Externally Threaded Fasteners

⁴ Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength

⁵ Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

⁶ Nuts must have specified minimum proof load stress equal to or greater than the specified minimum full-size tensile strength of the specified stud.

⁷ Nuts for stainless steel studs must be of the same alloy group as the specified bolt, cap screw, or stud.



TABLE 6A—STEEL DESIGN INFORMATION FOR FRACTIONAL THREADED ROD

DESIGN INFORMATION		Symbol	Units	Nominal rod diameter (in.) ¹						
				³ / ₈	¹ / ₂	⁵ / ₈	³ / ₄	⁷ / ₈	1	1 ¹ / ₄
Rod O.D.		<i>d</i>	in. (mm)	0.375 (9.5)	0.5 (12.7)	0.625 (15.9)	0.75 (19.1)	0.875 (22.2)	1 (25.4)	1.25 (31.8)
Rod effective cross-sectional area		<i>A_{se}</i>	in. ² (mm ²)	0.0775 (50)	0.1419 (92)	0.2260 (146)	0.3345 (216)	0.4617 (298)	0.6057 (391)	0.9691 (625)
ISO 898-1 Class 5.8	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	5,620 (25.0)	10,290 (45.8)	16,385 (72.9)	24,250 (107.9)	33,470 (148.9)	43,910 (195.3)	70,260 (312.5)
		<i>V_{sa}</i>	lb (kN)	3,370 (15.0)	6,175 (27.5)	9,830 (43.7)	14,550 (64.7)	20,085 (89.3)	26,345 (117.2)	42,155 (187.5)
	Reduction for seismic shear	<i>α_{v,seis}</i>	-	1.0						
	Strength reduction factor <i>φ</i> for tension ²	<i>φ</i>	-	0.65						
				Strength reduction factor <i>φ</i> for shear ²						0.60
ASTM A193 B7	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	9,685 (43.1)	17,735 (78.9)	28,250 (125.7)	41,810 (186.0)	57,710 (256.7)	75,710 (336.8)	121,135 (538.8)
		<i>V_{sa}</i>	lb (kN)	5,810 (25.9)	10,640 (47.3)	16,950 (75.4)	25,085 (111.6)	34,625 (154.0)	45,425 (202.1)	72,680 (323.3)
	Reduction for seismic shear	<i>α_{v,seis}</i>	-	1.0						
	Strength reduction factor <i>φ</i> for tension ³	<i>φ</i>	-	0.75						
				Strength reduction factor <i>φ</i> for shear ³						0.65
ASTM F1554 Gr. 36	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	- (36.6)	8,230 (36.6)	13,110 (58.3)	19,400 (86.3)	26,780 (119.1)	35,130 (156.3)	56,210 (250.0)
		<i>V_{sa}</i>	lb (kN)	- (22.0)	4,940 (22.0)	7,865 (35.0)	11,640 (51.8)	16,070 (71.5)	21,080 (93.8)	33,725 (150.0)
	Reduction factor, seismic shear	<i>α_{v,seis}</i>	-	0.6						
	Strength reduction factor <i>φ</i> for tension ³	<i>φ</i>	-	0.75						
				Strength reduction factor <i>φ</i> for shear ³						0.65
ASTM F1554 Gr. 55	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	- (47.4)	10,645 (47.4)	16,950 (75.4)	25,090 (111.6)	34,630 (154.0)	45,430 (202.1)	72,685 (323.3)
		<i>V_{sa}</i>	lb (kN)	- (28.4)	6,385 (28.4)	10,170 (45.2)	15,055 (67.0)	20,780 (92.4)	27,260 (121.3)	43,610 (194.0)
	Reduction factor, seismic shear	<i>α_{v,seis}</i>	-	1.0						
	Strength reduction factor <i>φ</i> for tension ³	<i>φ</i>	-	0.75						
				Strength reduction factor <i>φ</i> for shear ³						0.65
ASTM F1554 Gr. 105	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	- (78.9)	17,740 (78.9)	28,250 (125.7)	41,815 (186.0)	57,715 (256.7)	75,715 (336.8)	121,135 (538.8)
		<i>V_{sa}</i>	lb (kN)	- (47.4)	10,645 (47.4)	16,950 (75.4)	25,090 (111.6)	34,630 (154.0)	45,430 (202.1)	72,680 (323.3)
	Reduction factor, seismic shear	<i>α_{v,seis}</i>	-	1.0						
	Strength reduction factor <i>φ</i> for tension ³	<i>φ</i>	-	0.75						
				Strength reduction factor <i>φ</i> for shear ³						0.65
ASTM F593, CW Stainless	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	7,750 (34.5)	14,190 (63.1)	22,600 (100.5)	28,435 (126.5)	39,245 (174.6)	51,485 (229.0)	- (-)
		<i>V_{sa}</i>	lb (kN)	4,650 (20.7)	8,515 (37.9)	13,560 (60.3)	17,060 (75.9)	23,545 (104.7)	30,890 (137.4)	- (-)
	Reduction factor, seismic shear	<i>α_{v,seis}</i>	-	0.8						
	Strength reduction factor <i>φ</i> for tension ²	<i>φ</i>	-	0.65						
				Strength reduction factor <i>φ</i> for shear ²						0.60
ASTM A193, Gr. 8(M), Class 1 Stainless	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	-	-	-	-	-	-	55,240 (245.7)
		<i>V_{sa}</i>	lb (kN)	-	-	-	-	-	-	33,145 (147.4)
	Reduction factor, seismic shear	<i>α_{v,seis}</i>	-	0.8						
	Strength reduction factor <i>φ</i> for tension ²	<i>φ</i>	-	0.75						
				Strength reduction factor <i>φ</i> for shear ²						0.65

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N. For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf

¹ Values provided for common rod material types are based on specified strengths and calculated in accordance with ACI 318-14 Eq. (17.4.1.2) and Eq (17.5.1.2b) or ACI 318-11 Eq. (D-2) and Eq. (D-29), as applicable. Nuts and washers must be appropriate for the rod.

² For use with the load combinations of IBC Section 1605.2, ACI 318-14 5.3 or ACI 318-11 9.2, as applicable, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of *φ* must be determined in accordance with ACI 318-11 D.4.4. Values correspond to a brittle steel element.

³ For use with the load combinations of IBC Section 1605.2, ACI 318-14 5.3 or ACI 318-11 9.2, as applicable, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of *φ* must be determined in accordance with ACI 318-11 D.4.4. Values correspond to a ductile steel element.



Fractional Reinforcing Bars



Steel Strength

TABLE 6B—STEEL DESIGN INFORMATION FOR FRACTIONAL REINFORCING BARS

DESIGN INFORMATION		Symbol	Units	Nominal Reinforcing bar size (Rebar)							
				#3	#4	#5	#6	#7	#8	#9	#10
Nominal bar diameter		<i>d</i>	in. (mm)	³ / ₈ (9.5)	¹ / ₂ (12.7)	⁵ / ₈ (15.9)	³ / ₄ (19.1)	⁷ / ₈ (22.2)	1 (25.4)	¹ / ₈ (28.6)	¹ / ₄ (31.8)
Bar effective cross-sectional area		<i>A_{se}</i>	in. ² (mm ²)	0.11 (71)	0.2 (129)	0.31 (200)	0.44 (284)	0.6 (387)	0.79 (510)	1.0 (645)	1.27 (819)
ASTM A615 Grade 40	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	6,600 (29.4)	12,000 (53.4)	18,600 (82.7)	26,400 (117.4)	36,000 (160.1)	47,400 (210.9)	60,000 (266.9)	76,200 (339.0)
		<i>V_{sa}</i>	lb (kN)	3,960 (17.6)	7,200 (32.0)	11,160 (49.6)	15,840 (70.5)	21,600 (96.1)	28,440 (126.5)	36,000 (160.1)	45,720 (203.4)
	Reduction for seismic shear	<i>α_{v,seis}</i>	-	0.70							
	Strength reduction factor <i>φ</i> for tension ²	<i>φ</i>	-	0.65							
				0.60							
ASTM A615 Grade 60	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	9,900 (44.0)	18,000 (80.1)	27,900 (124.1)	39,600 (176.2)	54,000 (240.2)	71,100 (316.3)	90,000 (400.4)	114,300 (508.5)
		<i>V_{sa}</i>	lb (kN)	5,940 (26.4)	10,800 (48.0)	16,740 (74.5)	23,760 (105.7)	32,400 (144.1)	42,660 (189.8)	54,000 (240.2)	68,580 (305.1)
	Reduction for seismic shear	<i>α_{v,seis}</i>	-	0.70							
	Strength reduction factor <i>φ</i> for tension ²	<i>φ</i>	-	0.65							
				0.60							
ASTM A706 Grade 60	Nominal strength as governed by steel strength	<i>N_{sa}</i>	lb (kN)	8,800 (39.1)	16,000 (71.2)	24,800 (110.3)	35,200 (156.6)	48,000 (213.5)	63,200 (281.1)	80,000 (355.9)	101,600 (452.0)
		<i>V_{sa}</i>	lb (kN)	5,280 (23.5)	9,600 (42.7)	14,880 (66.2)	21,120 (94.0)	28,800 (128.1)	37,920 (168.7)	48,000 (213.5)	60,960 (271.2)
	Reduction for seismic shear	<i>α_{v,seis}</i>	-	0.70							
	Strength reduction factor <i>φ</i> for tension ³	<i>φ</i>	-	0.75							
				0.65							

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N. For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf

¹ Values provided for common rod material types are based on specified strengths and calculated in accordance with ACI 318-14 Eq. (17.4.1.2) and Eq (17.5.1.2b) or ACI 318-11 Eq. (D-2) and Eq. (D-29). Nuts and washers must be appropriate for the rod.

² For use with the load combinations of IBC Section 1605.2, ACI 318-14 5.3 or ACI 318-11 9.2, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of *φ* must be determined in accordance with ACI 318-11 D.4.4. Values correspond to a brittle steel element.

³ For use with the load combinations of IBC Section 1605.2, ACI 318-14 5.3 or ACI 318-11 9.2, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of *φ* must be determined in accordance with ACI 318-11 D.4.4. Values correspond to a ductile steel element.

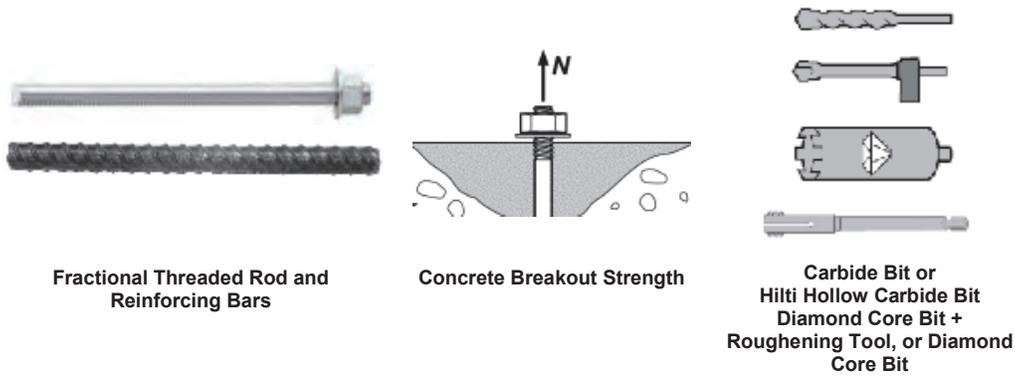


TABLE 7—CONCRETE BREAKOUT DESIGN INFORMATION FOR FRACTIONAL THREADED ROD AND REINFORCING BARS ALL DRILLING METHODS¹

DESIGN INFORMATION	Symbol	Units	Nominal rod diameter (in.) / Reinforcing bar size											
			³ / ₈ or #3	¹ / ₂	#4	⁵ / ₈	#5	³ / ₄	#6	⁷ / ₈	#7	1 or #8	#9	¹ / ₄ or #10
Effectiveness factor for cracked concrete	$k_{c,cr}$	in-lb (SI)	17 (7.1)											
Effectiveness factor for uncracked concrete	$k_{c,uncr}$	in-lb (SI)	24 (10)											
Minimum Embedment	$h_{ef,min}$	in. (mm)	² / ₈ (60)	² / ₄ (70)	² / ₈ (60)	³ / ₈ (79)	3 (76)	³ / ₂ (89)	3 (76)	³ / ₂ (89)	³ / ₈ (85)	4 (102)	⁴ / ₂ (114)	5 (127)
Maximum Embedment	$h_{ef,max}$	in. (mm)	⁷ / ₂ (191)	10 (254)	10 (254)	¹² / ₂ (318)	¹² / ₂ (318)	15 (381)	15 (381)	¹⁷ / ₂ (445)	¹⁷ / ₂ (445)	20 (508)	²² / ₂ (572)	25 (635)
Min. anchor spacing ³	s_{min}	in. (mm)	¹ / ₈ (48)	² / ₂ (64)	² / ₂ (64)	³ / ₈ (79)	³ / ₈ (79)	³ / ₄ (95)	³ / ₄ (95)	⁴ / ₈ (111)	⁴ / ₈ (111)	5 (127)	⁵ / ₈ (143)	⁶ / ₄ (159)
Min. edge distance ³	c_{min}	-	5d; or see Section 4.1.9 of this report for design with reduced minimum edge distances											
Minimum concrete thickness	h_{min}	in. (mm)	$h_{ef} + 1\frac{1}{4}$ ($h_{ef} + 30$)				$h_{ef} + 2d_o^{(4)}$							
Critical edge distance – splitting (for uncracked concrete)	c_{ac}	-	See Section 4.1.10 of this report.											
Strength reduction factor for tension, concrete failure modes, Condition B ²	ϕ	-	0.65											
Strength reduction factor for shear, concrete failure modes, Condition B ²	ϕ	-	0.70											

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Additional setting information is described in Figure 9A and 9B, Manufacturers Printed Installation Instructions (MPII).
² Values provided for post-installed anchors under Condition B without supplementary reinforcement as defined in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable.
³ For installations with ¹/₄-inch edge distance, refer to Section 4.1.9 for spacing and maximum torque requirements.
⁴ d_o = hole diameter.

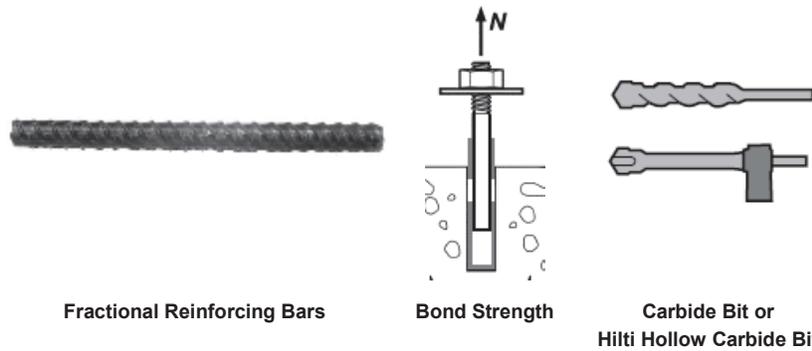


TABLE 8—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size							
					#3	#4	#5	#6	#7	#8	#9	#10
Minimum Embedment			$h_{ef,min}$	in. (mm)	2 ³ / ₈ (60)	2 ³ / ₈ (60)	3 (76)	3 (76)	3 ³ / ₈ (85)	4 (102)	4 ¹ / ₂ (114)	5 (127)
Maximum Embedment			$h_{ef,max}$	in. (mm)	7 ¹ / ₂ (191)	10 (254)	12 ¹ / ₂ (318)	15 (381)	17 ¹ / ₂ (445)	20 (508)	22 ¹ / ₂ (572)	25 (635)
Dry concrete and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	1,350 (9.3)	1,360 (9.4)	1,390 (9.6)	1,410 (9.7)	1,410 (9.7)	1,420 (9.8)	1,390 (9.6)	1,340 (9.3)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,770 (12.2)	1,740 (12.0)	1,720 (11.9)	1,690 (11.7)	1,670 (11.5)	1,640 (11.3)	1,620 (11.2)	1,590 (11.0)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	930 (6.4)	940 (6.5)	960 (6.6)	970 (6.7)	980 (6.7)	980 (6.8)	960 (6.6)	930 (6.4)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,220 (8.4)	1,200 (8.3)	1,190 (8.2)	1,170 (8.1)	1,150 (7.9)	1,130 (7.8)	1,120 (7.7)	1,100 (7.6)
	Anchor Category		-	-	1	1	1	1	1	1	1	1
	Strength Reduction factor		$\phi_{d, \phi_{ws}}$	-	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	1,000 (6.9)	1,010 (6.9)	1,040 (7.2)	1,060 (7.3)	1,070 (7.4)	1,090 (7.5)	1,070 (7.4)	1,050 (7.2)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,300 (9.0)	1,290 (8.9)	1,290 (8.9)	1,280 (8.8)	1,270 (8.7)	1,260 (8.7)	1,240 (8.6)	1,240 (8.6)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	690 (4.7)	700 (4.8)	720 (5.0)	730 (5.0)	740 (5.1)	750 (5.2)	740 (5.1)	720 (5.0)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	900 (6.2)	890 (6.1)	890 (6.1)	880 (6.1)	870 (6.0)	870 (6.0)	860 (5.9)	860 (5.9)
	Anchor Category		-	-	3	3	3	3	3	3	3	3
	Strength Reduction factor		ϕ_{wf}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	860 (5.9)	890 (6.1)	920 (6.3)	940 (6.5)	960 (6.6)	990 (6.9)	970 (6.7)	980 (6.8)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,140 (7.9)	1,130 (7.8)	1,140 (7.9)	1,140 (7.9)	1,140 (7.9)	1,150 (7.9)	1,130 (7.8)	1,150 (8.0)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	590 (4.1)	610 (4.2)	630 (4.4)	650 (4.5)	660 (4.6)	690 (4.7)	670 (4.6)	680 (4.7)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	790 (5.4)	780 (5.4)	790 (5.4)	790 (5.4)	790 (5.4)	790 (5.5)	790 (5.4)	800 (5.5)
	Anchor Category		-	-	3	3	3	3	3	3	3	3
	Strength Reduction factor		ϕ_{uw}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.9	0.9	0.9	0.9	0.9	0.9	0.9	

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

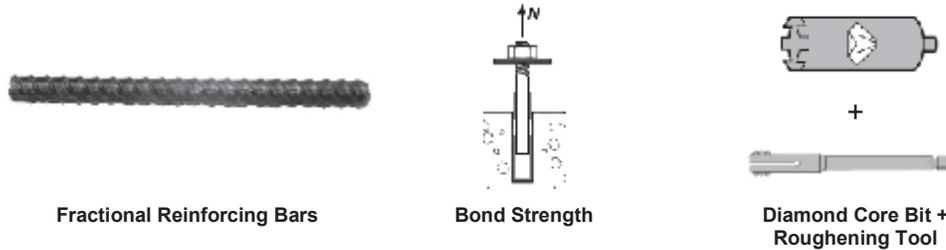


TABLE 9—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size					
					#5	#6	#7	#8	#9	
Minimum Embedment			$h_{ef,min}$	in. (mm)	3 (76)	3 (76)	$3\frac{3}{8}$ (85)	4 (102)	4½ (115)	
Maximum Embedment			$h_{ef,max}$	in. (mm)	12½ (318)	11¼ (286)	17½ (445)	20 (508)	22½ (573)	
Dry and water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	970 (6.7)	990 (6.8)	990 (6.8)	995 (6.9)	970 (6.7)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,720 (11.9)	1,690 (11.7)	1,670 (11.5)	1,640 (11.3)	1,620 (11.2)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	670 (4.6)	680 (4.7)	680 (4.7)	690 (4.8)	670 (4.6)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,190 (8.2)	1,170 (8.1)	1,150 (7.9)	1,130 (7.8)	1,120 (7.7)	
	Anchor Category			-	-	1	1	1	1	1
	Strength Reduction factor			ϕ_t, ϕ_{vs}	-	0.65	0.65	0.65	0.65	0.65
	Reduction for seismic tension			$\phi_{N,seis}$	-	0.9	0.9	0.9	0.9	0.9

For SI: 1 inch ≡ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi
¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi ≤ f_c ≤ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].
² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
 Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

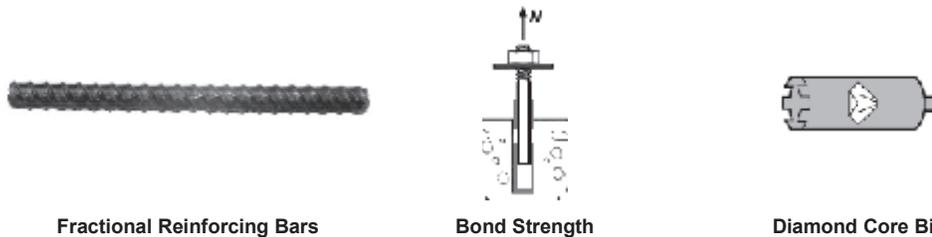


TABLE 10—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size							
					#3	#4	#5	#6	#7	#8	#9	#10
Minimum Embedment			$h_{ef,min}$	in. (mm)	$2\frac{3}{8}$ (60)	$2\frac{3}{8}$ (60)	3 (76)	3 (76)	$3\frac{3}{8}$ (85)	4 (102)	4½ (114)	5 (127)
Maximum Embedment			$h_{ef,max}$	in. (mm)	7½ (191)	10 (254)	12½ (318)	15 (381)	17½ (445)	20 (508)	22½ (572)	25 (635)
Dry and water saturated concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)	1,150 (8.0)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	800 (5.5)	800 (5.5)	800 (5.5)	800 (5.5)	800 (5.5)	800 (5.5)	800 (5.5)	800 (5.5)
	Anchor Category			-	-	2	2	3	3	3	3	3
	Strength Reduction factor			ϕ_t, ϕ_{vs}	-	0.55	0.55	0.45	0.45	0.45	0.45	0.45

For SI: 1 inch ≡ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi
¹ Bond strength values correspond to concrete compressive strength $f_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f_c / 2,500)^{0.25}$ for uncracked concrete. [For SI: $(f_c / 17.2)^{0.25}$]. See Section 4.1.4 of this report for bond strength determination.
² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
 Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

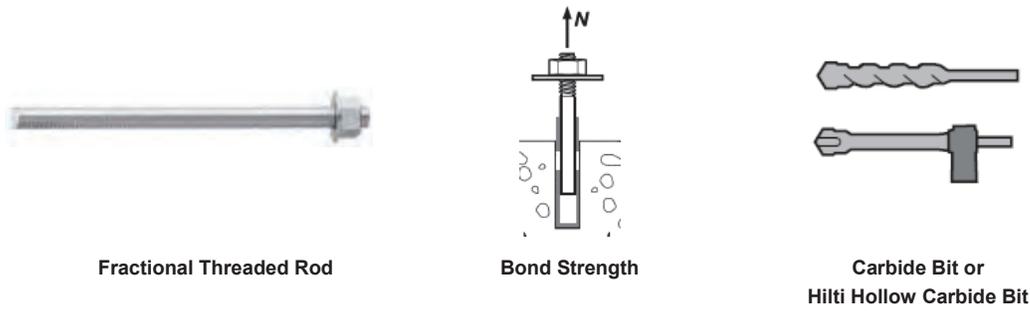


TABLE 11—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL THREADED ROD IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (in.)							
					³ / ₈	¹ / ₂	⁵ / ₈	³ / ₄	⁷ / ₈	1	1 ¹ / ₄	
Minimum Embedment			$h_{ef,min}$	in. (mm)	2 ³ / ₈ (60)	2 ¹ / ₄ (70)	3 ¹ / ₈ (79)	3 ¹ / ₂ (89)	3 ¹ / ₂ (89)	4 (102)	5 (127)	
Maximum Embedment			$h_{ef,max}$	in. (mm)	7 ¹ / ₂ (191)	10 (254)	12 ¹ / ₂ (318)	15 (381)	17 ¹ / ₂ (445)	20 (508)	25 (635)	
Dry concrete and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	1,280 (8.8)	1,270 (8.7)	1,260 (8.7)	1,250 (8.6)	1,240 (8.6)	1,240 (8.5)	1,180 (8.1)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	2,380 (16.4)	2,300 (15.8)	2,210 (15.3)	2,130 (14.7)	2,040 (14.1)	1,960 (13.5)	1,790 (12.4)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	880 (6.1)	870 (6.0)	870 (6.0)	860 (5.9)	860 (5.9)	850 (5.9)	810 (5.6)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,640 (11.3)	1,590 (10.9)	1,530 (10.5)	1,470 (10.1)	1,410 (9.7)	1,350 (9.3)	1,240 (8.5)	
	Anchor Category		-	-	-	1	1	1	1	1	1	1
	Strength Reduction factor		ϕ_d, ϕ_{WS}	ϕ_s, ϕ_{σ}	-	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	940 (6.5)	940 (6.5)	940 (6.5)	940 (6.5)	940 (6.5)	950 (6.5)	920 (6.4)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,760 (12.1)	1,700 (11.7)	1,660 (11.4)	1,600 (11.0)	1,550 (10.7)	1,500 (10.4)	1,400 (9.7)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	650 (4.5)	650 (4.5)	650 (4.5)	650 (4.5)	650 (4.5)	650 (4.5)	640 (4.4)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,210 (8.4)	1,170 (8.1)	1,140 (7.9)	1,110 (7.6)	1,070 (7.4)	1,040 (7.1)	970 (6.7)	
	Anchor Category		-	-	-	3	3	3	3	3	3	3
	Strength Reduction factor		ϕ_{WF}	-	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	820 (5.7)	830 (5.7)	830 (5.8)	840 (5.8)	850 (5.9)	860 (5.9)	860 (5.9)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,530 (10.6)	1,500 (10.3)	1,470 (10.1)	1,430 (9.9)	1,400 (9.6)	1,370 (9.4)	1,300 (9.0)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	570 (3.9)	570 (3.9)	580 (4.0)	580 (4.0)	590 (4.0)	590 (4.1)	590 (4.1)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,060 (7.3)	1,030 (7.1)	1,010 (7.0)	990 (6.8)	960 (6.6)	940 (6.5)	900 (6.2)	
	Anchor Category		-	-	-	3	3	3	3	3	3	3
	Strength Reduction factor		ϕ_{UW}	-	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.92	0.93	0.95	1	1	1	1	

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

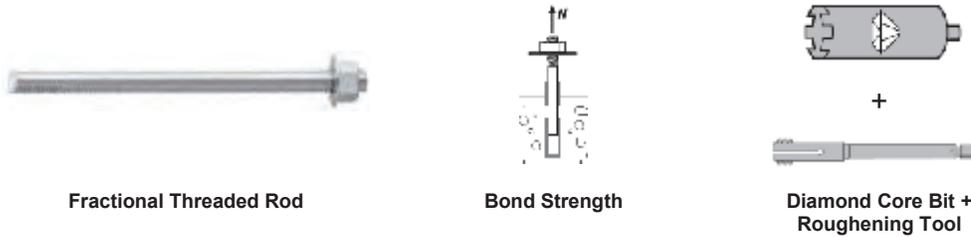


TABLE 12—BOND STRENGTH DESIGN INFORMATION FOR U.S. CUSTOMARY UNIT THREADED RODS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (in.)					
					⁵ / ₈	³ / ₄	⁷ / ₈	1	1 ¹ / ₄	
Minimum Embedment			$h_{ef,min}$	in. (mm)	3 ¹ / ₈ (79)	3 ¹ / ₂ (89)	3 ¹ / ₂ (89)	4 (102)	5 (127)	
Maximum Embedment			$h_{ef,max}$	in. (mm)	12 ¹ / ₂ (318)	11 ¹ / ₄ (286)	17 ¹ / ₂ (445)	20 (508)	25 (635)	
Dry and water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{t}_{k,cr}$	psi (MPa)	880 (6.1)	875 (6.0)	870 (6.0)	870 (6.0)	825 (5.7)	
		Characteristic bond strength in uncracked concrete	$\bar{t}_{k,uncr}$	psi (MPa)	2,210 (15.3)	2,130 (14.7)	2,040 (14.1)	1,960 (13.5)	1,790 (12.4)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{t}_{k,cr}$	psi (MPa)	610 (4.2)	605 (4.2)	605 (4.2)	600 (4.1)	570 (3.9)	
		Characteristic bond strength in uncracked concrete	$\bar{t}_{k,uncr}$	psi (MPa)	1,530 (10.5)	1,470 (10.1)	1,410 (9.7)	1,350 (9.3)	1,240 (8.5)	
	Anchor Category			-	-	1	1	1	1	1
	Strength Reduction factor			ϕ_t, ϕ_{vs}	-	0.65	0.65	0.65	0.65	0.65
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.95	1	1	1	1	

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi \leq $f'_c \leq$ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

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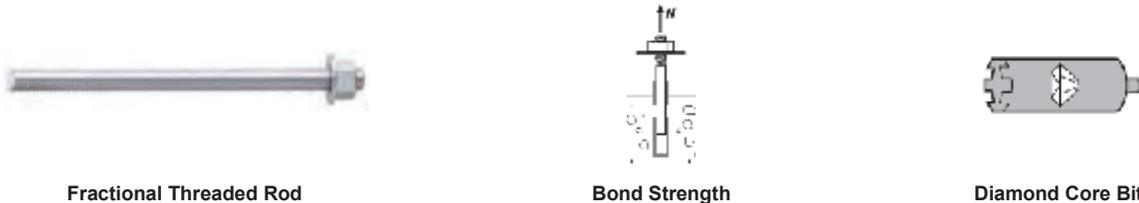


TABLE 13—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL THREADED RODS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (in.)						
					³ / ₈	¹ / ₂	⁵ / ₈	³ / ₄	⁷ / ₈	1	1 ¹ / ₄
Minimum Embedment			$h_{ef,min}$	in. (mm)	2 ³ / ₈ (60)	2 ³ / ₄ (70)	3 ¹ / ₈ (79)	3 ¹ / ₂ (89)	3 ¹ / ₂ (89)	4 (102)	5 (127)
Maximum Embedment			$h_{ef,max}$	in. (mm)	7 ¹ / ₂ (191)	10 (254)	12 ¹ / ₂ (318)	15 (381)	17 ¹ / ₂ (445)	20 (508)	25 (635)
Dry concrete and water saturated concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\bar{t}_{k,uncr}$	psi (MPa)	1,550 (10.7)	1,550 (10.7)	1,550 (10.7)	1,550 (10.7)	1,550 (10.7)	1,550 (10.7)	1,550 (10.7)
		Characteristic bond strength in uncracked concrete	$\bar{t}_{k,uncr}$	psi (MPa)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)
	Anchor Category			-	-	2	2	3	3	3	3
	Strength Reduction factor			ϕ_t, ϕ_{vs}	-	0.55	0.55	0.45	0.45	0.45	0.45

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.



TABLE 14—STEEL DESIGN INFORMATION FOR METRIC THREADED ROD AND EU METRIC REINFORCING BARS

DESIGN INFORMATION		Symbol	Units	Nominal rod diameter (mm) ¹								
				8	10	12	16	20	24	27	30	
Rod Outside Diameter		d	mm (in.)	8 (0.31)	10 (0.39)	12 (0.47)	16 (0.63)	20 (0.79)	24 (0.94)	27 (1.06)	30 (1.18)	
Rod effective cross-sectional area		A_{se}	mm ² (in. ²)	36.6 (0.057)	58.0 (0.090)	84.3 (0.131)	157 (0.243)	245 (0.380)	353 (0.547)	459 (0.711)	561 (0.870)	
ISO 898-1 Class 5.8	Nominal strength as governed by steel strength	N_{sa}	kN (lb)	18.3 (4,114)	29.0 (6,519)	42.0 (9,476)	78.5 (17,647)	122.5 (27,539)	176.5 (39,679)	229.5 (51,594)	280.5 (63,059)	
		V_{sa}	kN (lb)	11.0 (2,648)	14.5 (3,260)	25.5 (5,685)	47.0 (10,588)	73.5 (16,523)	106.0 (23,807)	137.5 (30,956)	168.5 (37,835)	
	Reduction for seismic shear	$\alpha_{V,seis}$	-	1.00								
	Strength reduction factor for tension ²	ϕ	-	0.65								
	Strength reduction factor for shear ²	ϕ	-	0.60								
ISO 898-1 Class 8.8	Nominal strength as governed by steel strength	N_{sa}	kN (lb)	29.3 (6,582)	46.5 (10,431)	67.5 (15,161)	125.5 (28,236)	196.0 (44,063)	282.5 (63,486)	367.0 (82,550)	449.0 (100,894)	
		V_{sa}	kN (lb)	17.6 (3,949)	23.0 (5,216)	40.5 (9,097)	75.5 (16,942)	117.5 (26,438)	169.5 (38,092)	220.5 (49,530)	269.5 (60,537)	
	Reduction for seismic shear	$\alpha_{V,seis}$	-	1.00								
	Strength reduction factor for tension ²	ϕ	-	0.65								
	Strength reduction factor for shear ²	ϕ	-	0.60								
ISO 3506-1 Class A4 Stainless ³	Nominal strength as governed by steel strength	N_{sa}	kN (lb)	25.6 (5,760)	40.6 (9,127)	59.0 (13,266)	109.9 (24,706)	171.5 (38,555)	247.1 (55,550)	229.5 (51,594)	280.5 (63,059)	
		V_{sa}	kN (lb)	15.4 (3,456)	20.3 (4,564)	35.4 (7,960)	65.9 (14,824)	102.9 (23,133)	148.3 (33,330)	137.7 (30,956)	168.3 (37,835)	
	Reduction for seismic shear	$\alpha_{V,seis}$	-	0.80								
	Strength reduction factor for tension ²	ϕ	-	0.65								
	Strength reduction factor for shear ²	ϕ	-	0.60								
DESIGN INFORMATION		Symbol	Units	Nominal reinforcing bar diameter (mm)								
Nominal bar diameter		d	mm (in.)	10.0 (0.394)	12.0 (0.472)	14.0 (0.551)	16.0 (0.630)	20.0 (0.787)	25.0 (0.984)	28.0 (1.102)	30.0 (1.224)	32.0 (1.260)
Bar effective cross-sectional area		A_{se}	mm ² (in. ²)	78.5 (0.122)	113.1 (0.175)	153.9 (0.239)	201.1 (0.312)	314.2 (0.487)	490.9 (0.761)	615.8 (0.954)	706.9 (1.096)	804.2 (1.247)
DIN 488 BST 550/500	Nominal strength as governed by steel strength	N_{sa}	kN (lb)	43.0 (9,711)	62.0 (13,984)	84.5 (19,034)	110.5 (24,860)	173.0 (38,844)	270.0 (60,694)	338.5 (76,135)	388.8 (87,406)	442.5 (99,441)
		V_{sa}	kN (lb)	26.0 (5,827)	37.5 (8,390)	51.0 (11,420)	66.5 (14,916)	103.0 (23,307)	162.0 (36,416)	203.0 (45,681)	233.3 (52,444)	265.5 (59,665)
	Reduction for seismic shear	$\alpha_{V,seis}$	-	0.70								
	Strength reduction factor for tension ²	ϕ	-	0.65								
	Strength reduction factor for shear ²	ϕ	-	0.60								

¹ Values provided for common rod material types are based on specified strengths and calculated in accordance with ACI 318-14 Eq. (17.4.1.2) or Eq. (17.5.1.2b) or ACI 318-11 Eq. (D-2) and Eq. (D-29), as applicable. Nuts and washers must be appropriate for the rod.

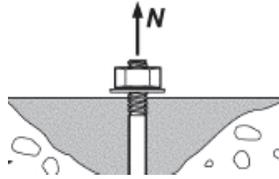
² For use with the load combinations of IBC Section 1605.2, ACI 318-14 5.3, or ACI 318-11 9.2, as applicable, as set forth in ACI 318-14 17.3.3 or ACI 318 D.4.3, as applicable. If the load combinations of ACI 318-11 Appendix C are used, the appropriate value of ϕ must be determined in accordance with ACI 318-11 D.4.4.

³ Values correspond to a brittle steel element.

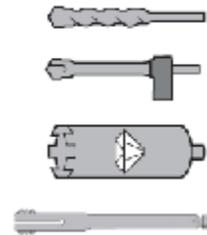
³ A4-70 Stainless (M8- M24); A4-502 Stainless (M27- M30)



Metric Threaded Rod and EU Metric Reinforcing Bars



Concrete Breakout Strength



Carbide Bit or Hilti Hollow Carbide Bit
Diamond Core Bit + Roughening Tool, or Diamond Core Bit

TABLE 15—CONCRETE BREAKOUT DESIGN INFORMATION FOR METRIC THREADED ROD AND EU METRIC REINFORCING BARS ALL DRILLING METHODS¹

DESIGN INFORMATION	Symbol	Units	Nominal rod diameter (mm)								
			8	10	12	16	20	24	27	30	
Minimum Embedment	$h_{ef,min}$	mm (in.)	60 (2.4)	60 (2.4)	70 (2.8)	80 (3.1)	90 (3.5)	100 (3.9)	110 (4.3)	120 (4.7)	
Maximum Embedment	$h_{ef,max}$	mm (in.)	160 (6.3)	200 (7.9)	240 (9.4)	320 (12.6)	400 (15.7)	480 (18.9)	540 (21.4)	600 (23.7)	
Min. anchor spacing ³	s_{min}	mm (in.)	40 (1.6)	50 (2.0)	60 (2.4)	80 (3.2)	100 (3.9)	120 (4.7)	135 (5.3)	150 (5.9)	
Min. edge distance ³	c_{min}	-	5d; or see Section 4.1.9 of this report for design with reduced minimum edge distances								
Minimum concrete thickness	h_{min}	mm (in.)	$h_{ef} + 30$ $(h_{ef} + 1\frac{1}{4})$			$h_{ef} + 2d_o^{(4)}$					
DESIGN INFORMATION	Symbol	Units	Nominal reinforcing bar diameter (mm)								
			10	12	14	16	20	25	28	30	32
Minimum Embedment	$h_{ef,min}$	mm (in.)	60 (2.4)	70 (2.8)	80 (3.1)	80 (3.1)	90 (3.5)	100 (3.9)	112 (4.4)	120 (4.7)	128 (5.0)
Maximum Embedment	$h_{ef,max}$	mm (in.)	200 (7.9)	240 (9.4)	280 (11.0)	320 (12.6)	400 (15.7)	500 (19.7)	560 (22.0)	600 (23.7)	640 (25.2)
Min. anchor spacing ³	s_{min}	mm (in.)	50 (2.0)	60 (2.4)	70 (2.8)	80 (3.2)	100 (3.9)	125 (4.9)	140 (5.5)	150 (5.9)	160 (6.3)
Min. edge distance ³	c_{min}	-	5d; or see Section 4.1.9 of this report for design with reduced minimum edge distances								
Minimum concrete thickness	h_{min}	mm (in.)	$h_{ef} + 30$ $(h_{ef} + 1\frac{1}{4})$			$h_{ef} + 2d_o^{(4)}$					
Critical edge distance – splitting (for uncracked concrete)	c_{ac}	-	See Section 4.1.10 of this report.								
Effectiveness factor for cracked concrete	$k_{c,cr}$	SI (in-lb)					7.1 (17)				
Effectiveness factor for uncracked concrete	$k_{c,uncr}$	SI (in-lb)					10 (24)				
Strength reduction factor for tension, concrete failure modes, Condition B ²	ϕ	-	0.65								
Strength reduction factor for shear, concrete failure modes, Condition B ²	ϕ	-	0.70								

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Additional setting information is described in Figure 9A and 9B, Manufacturers Printed Installation Instructions (MPII).

² Values provided for post-installed anchors installed under Condition B without supplementary reinforcement as defined in ACI 318-14 17.3.3 or ACI 318-11 D.4.3.

³ For installations with 1³/₄-inch edge distance, refer to Section 4.1.9 for spacing and maximum torque requirements.

⁴ d_o = hole diameter.

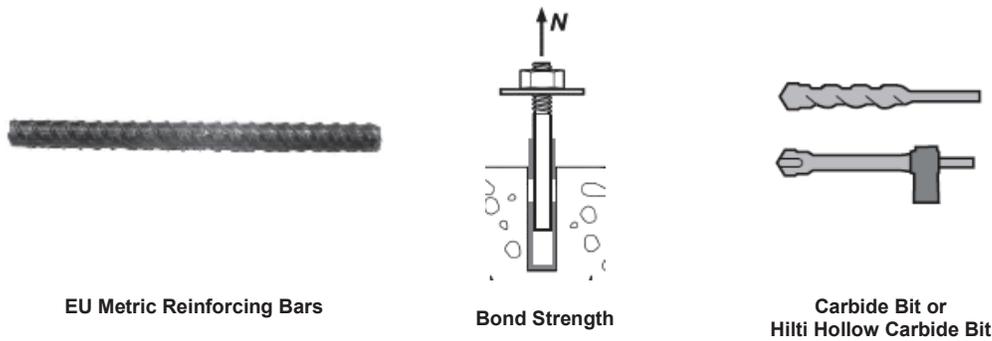


TABLE 16—BOND STRENGTH DESIGN INFORMATION FOR EU METRIC REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar diameter (mm)									
					10	12	14	16	20	25	28	30	32	
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	70 (2.8)	80 (3.1)	80 (3.1)	90 (3.5)	100 (3.9)	112 (4.4)	120 (4.7)	128 (5.0)	
Maximum Embedment			$h_{ef,max}$	mm (in.)	200 (7.9)	240 (9.4)	280 (11.0)	320 (12.6)	400 (15.7)	500 (19.7)	560 (22.0)	600 (23.7)	640 (25.2)	
Dry concrete and Water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	9.3 (1,350)	9.4 (1,360)	9.5 (1,380)	9.6 (1,390)	9.7 (1,410)	9.8 (1,420)	9.7 (1,400)	9.5 (1,370)	9.3 (1,350)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	12.2 (1,770)	12.1 (1,750)	12.0 (1,730)	11.8 (1,720)	11.6 (1,690)	11.4 (1,650)	11.2 (1,620)	11.1 (1,610)	11.0 (1,590)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.4 (930)	6.5 (940)	6.5 (950)	6.6 (960)	6.7 (970)	6.8 (980)	6.7 (970)	6.5 (950)	6.4 (930)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	8.4 (1,220)	8.3 (1,210)	8.3 (1,200)	8.2 (1,190)	8.0 (1,160)	7.8 (1,140)	7.7 (1,120)	7.7 (1,110)	7.6 (1,100)	
	Anchor Category			-	-	1	1	1	1	1	1	1	1	1
	Strength Reduction factor			ϕ_d, ϕ_{ws}	-	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.9 (1,000)	6.9 (1,010)	7.0 (1,020)	7.2 (1,040)	7.4 (1,070)	7.4 (1,080)	7.4 (1,080)	7.4 (1,070)	7.2 (1,050)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	9.0 (1,310)	8.9 (1,300)	8.9 (1,280)	8.9 (1,280)	8.8 (1,270)	8.7 (1,250)	8.6 (1,250)	8.6 (1,250)	8.6 (1,240)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	4.7 (690)	4.8 (700)	4.8 (700)	5.0 (720)	5.1 (740)	5.1 (740)	5.1 (740)	5.1 (740)	5.0 (720)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	6.2 (900)	6.2 (890)	6.1 (890)	6.1 (890)	6.1 (880)	6.0 (870)	5.9 (860)	5.9 (860)	5.9 (860)	
	Anchor Category			-	-	3	3	3	3	3	3	3	3	3
	Strength Reduction factor			ϕ_{wf}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.0 (880)	6.1 (890)	6.2 (890)	6.3 (920)	6.6 (960)	6.8 (980)	6.8 (980)	6.8 (990)	6.8 (980)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	7.9 (1,140)	7.8 (1,140)	7.8 (1,130)	7.8 (1,140)	7.9 (1,140)	7.8 (1,140)	7.9 (1,140)	8.0 (1,150)	8.0 (1,160)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	4.2 (600)	4.2 (610)	4.3 (620)	4.4 (630)	4.6 (660)	4.7 (680)	4.7 (680)	4.7 (680)	4.7 (680)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	5.4 (790)	5.4 (780)	5.4 (780)	5.4 (790)	5.4 (790)	5.4 (780)	5.4 (790)	5.5 (800)	5.5 (800)	
	Anchor Category			-	-	3	3	3	3	3	3	3	3	3
	Strength Reduction factor			ϕ_{lw}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

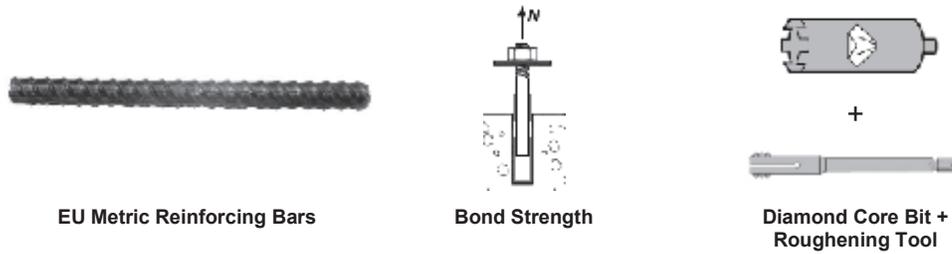


TABLE 17—BOND STRENGTH DESIGN INFORMATION FOR EU METRIC REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar diameter (mm)				
					14	16	20	25	28
Minimum Embedment			$h_{ef,min}$	mm (in.)	80 (3.1)	80 (3.1)	90 (3.5)	100 (3.9)	112 (4.4)
Maximum Embedment			$h_{ef,max}$	mm (in.)	280 (11.0)	320 (12.6)	400 (15.7)	500 (19.7)	560 (22.0)
Dry and water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.7 (965)	6.7 (970)	6.8 (985)	6.9 (995)	6.8 (980)
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	12.0 (1,730)	11.8 (1,720)	11.6 (1,690)	11.4 (1,650)	11.2 (1,620)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	4.6 (665)	4.6 (670)	4.7 (680)	4.8 (685)	4.7 (680)
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	8.3 (1,200)	8.2 (1,190)	8.0 (1,160)	7.8 (1,140)	7.7 (1,120)
	Anchor Category		-	-	1	1	1	1	1
	Strength Reduction factor		ϕ_s, ϕ_{ws}	-	0.65	0.65	0.65	0.65	0.65
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.9	0.9	0.9	0.9	0.9

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi \leq $f_c \leq$ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

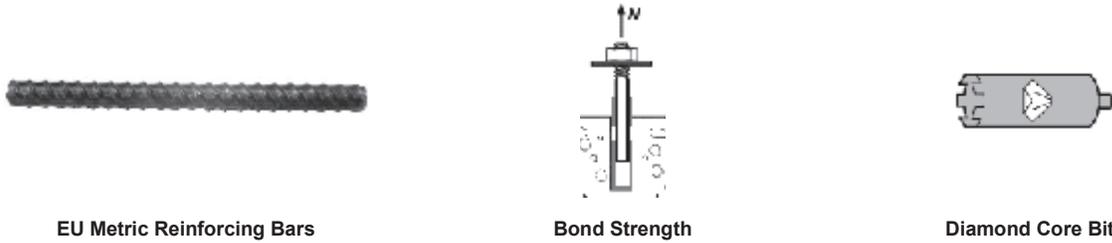


TABLE 18—BOND STRENGTH DESIGN INFORMATION FOR EU METRIC REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar diameter (mm)								
					10	12	14	16	20	25	28	30	32
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	70 (2.8)	80 (3.1)	80 (3.1)	90 (3.5)	100 (3.9)	112 (4.4)	120 (4.7)	128 (5.0)
Maximum Embedment			$h_{ef,max}$	mm (in.)	200 (7.9)	240 (9.4)	280 (11.0)	320 (12.6)	400 (15.7)	500 (19.7)	560 (22.0)	600 (23.7)	640 (25.2)
Dry and Water Saturated concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)
	Temperature range B ²	Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)
	Anchor Category		-		2	2	2	3	3	3	3	3	3
	Strength Reduction factor		ϕ_u, ϕ_{ws}		0.55	0.55	0.55	0.45	0.45	0.45	0.45	0.45	0.45

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
 Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

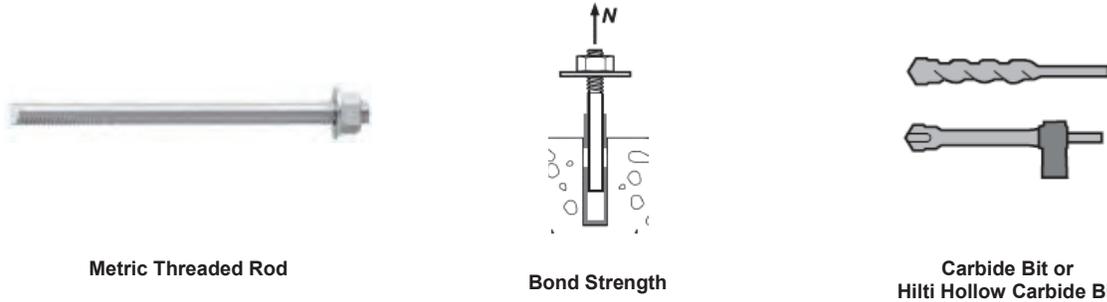


TABLE 19—BOND STRENGTH DESIGN INFORMATION FOR METRIC THREADED RODS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (mm)								
					8	10	12	16	20	24	27	30	
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	60 (2.4)	70 (2.8)	80 (3.1)	90 (3.5)	100 (3.9)	110 (4.3)	120 (4.7)	
Maximum Embedment			$h_{ef,max}$	mm (in.)	160 (6.3)	200 (7.9)	240 (9.4)	320 (12.6)	400 (15.7)	480 (18.9)	540 (21.4)	600 (23.7)	
Dry and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	8.8 (1,280)	8.8 (1,280)	8.8 (1,270)	8.7 (1,260)	8.6 (1,250)	8.5 (1,240)	8.5 (1,230)	8.4 (1,220)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	16.7 (2,420)	16.3 (2,370)	16.0 (2,320)	15.2 (2,210)	14.5 (2,100)	13.8 (2,000)	13.2 (1,920)	12.7 (1,840)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.1 (890)	6.1 (880)	6.0 (880)	6.0 (870)	5.9 (860)	5.9 (860)	5.9 (850)	5.8 (840)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	11.5 (1,670)	11.3 (1,630)	11.0 (1,600)	10.5 (1,520)	10.0 (1,450)	9.5 (1,380)	9.1 (1,320)	8.7 (1,270)	
	Anchor Category			-	-	1	1	1	1	1	1	1	1
	Strength Reduction factor			ϕ_{st}, ϕ_{WS}	-	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.5 (940)	6.5 (940)	6.5 (940)	6.5 (940)	6.5 (940)	6.5 (940)	6.5 (950)	6.5 (950)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	12.3 (1,780)	12.1 (1,750)	11.8 (1,710)	11.4 (1,650)	11.0 (1,590)	10.5 (1,520)	10.2 (1,470)	9.8 (1,430)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	4.5 (650)	4.5 (650)	4.5 (650)	4.5 (650)	4.5 (650)	4.5 (650)	4.5 (650)	4.5 (650)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	8.5 (1,230)	8.3 (1,210)	8.2 (1,180)	7.9 (1,140)	7.6 (1,100)	7.2 (1,050)	7.0 (1,020)	6.8 (990)	
	Anchor Category			-	-	3	3	3	3	3	3	3	3
	Strength Reduction factor			ϕ_{wf}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	5.7 (820)	5.7 (820)	5.7 (830)	5.7 (830)	5.8 (840)	5.9 (860)	6.0 (870)	6.0 (870)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	10.7 (1,550)	10.5 (1,530)	10.4 (1,500)	10.1 (1,460)	9.8 (1,420)	9.5 (1,380)	9.3 (1,350)	9.1 (1,320)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	3.9 (570)	3.9 (570)	3.9 (570)	4.0 (580)	4.0 (580)	4.1 (590)	4.1 (600)	4.2 (600)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	7.4 (1,070)	7.3 (1,060)	7.2 (1,040)	7.0 (1,010)	6.8 (980)	6.6 (950)	6.4 (930)	6.3 (910)	
	Anchor Category			-	-	3	3	3	3	3	3	3	3
	Strength Reduction factor			ϕ_{sw}	-	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	1	0.92	0.93	0.95	1	1	1	1	

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
 Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.



TABLE 20—BOND STRENGTH DESIGN INFORMATION FOR METRIC THREADED RODS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (mm)					
					16	20	24	27	30	
Minimum Embedment			$h_{ef,min}$	mm (in.)	80 (3.1)	90 (3.5)	100 (3.9)	110 (4.3)	120 (4.7)	
Maximum Embedment			$h_{ef,max}$	mm (in.)	320 (12.6)	400 (15.7)	480 (18.9)	540 (21.4)	600 (23.7)	
Dry and water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	6.1 (880)	6.0 (875)	6.0 (870)	6.0 (860)	5.9 (855)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	15.2 (2,210)	14.5 (2,100)	13.8 (2,000)	13.2 (1,920)	12.7 (1,840)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\bar{\tau}_{k,cr}$	MPa (psi)	4.2 (610)	4.2 (605)	4.2 (600)	4.2 (595)	4.1 (590)	
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	10.5 (1,520)	10.0 (1,450)	9.5 (1,385)	9.1 (1,320)	8.7 (1,270)	
	Anchor Category			-	-	1	1	1	1	1
	Strength Reduction factor			ϕ_d, ϕ_{NS}	-	0.65	0.65	0.65	0.65	0.65
Reduction for seismic tension			$\alpha_{NS,seis}$	-	0.95	1	1	1	1	

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi ≤ f_c ≤ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].
² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

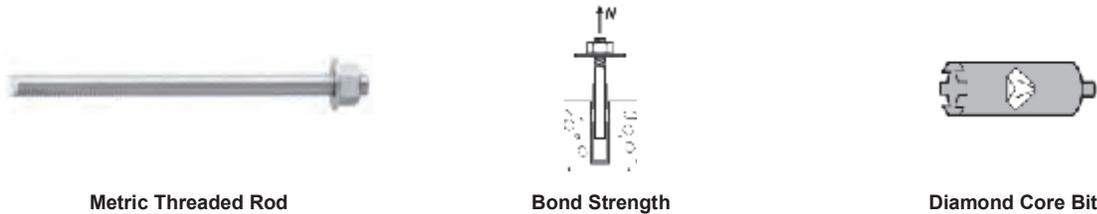


TABLE 21—BOND STRENGTH DESIGN INFORMATION FOR METRIC THREADED RODS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal rod diameter (mm)							
					8	10	12	16	20	24	27	30
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	60 (2.4)	70 (2.8)	80 (3.1)	90 (3.5)	100 (3.9)	110 (4.3)	120 (4.7)
Maximum Embedment			$h_{ef,max}$	mm (in.)	160 (6.3)	200 (7.9)	240 (9.4)	320 (12.6)	400 (15.7)	480 (18.9)	540 (21.4)	600 (23.7)
Dry concrete and water saturated concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)	10.7 (1,550)
		Characteristic bond strength in uncracked concrete	$\bar{\tau}_{k,uncr}$	MPa (psi)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)
	Anchor Category			-	-	2	2	2	3	3	3	3
	Strength Reduction factor			ϕ_d, ϕ_{NS}	-	0.55	0.55	0.55	0.45	0.45	0.45	0.45

For SI: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi
¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$]. See Section 4.1.4 of this report for bond strength determination.
² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.



TABLE 22—STEEL DESIGN INFORMATION FOR CANADIAN METRIC REINFORCING BARS¹

DESIGN INFORMATION	Symbol	Units	Nominal reinforcing bar size				
			10 M	15 M	20 M	25 M	30 M
Nominal bar diameter	d	mm (in.)	11.3 (0.445)	16.0 (0.630)	19.5 (0.768)	25.2 (0.992)	29.9 (1.177)
Bar effective cross-sectional area	A_{se}	mm ² (in. ²)	100.3 (0.155)	201.1 (0.312)	298.6 (0.463)	498.8 (0.773)	702.2 (1.088)
Nominal strength as governed by steel strength	N_{sa}	kN (lb)	54.0 (12,175)	108.5 (24,408)	161.5 (36,255)	270.0 (60,548)	380.0 (85,239)
	V_{sa}	kN (lb)	32.5 (7,305)	65.0 (14,645)	97.0 (21,753)	161.5 (36,329)	227.5 (51,144)
Reduction for seismic shear	$\alpha_{V,seis}$	-	0.70				
Strength reduction factor for tension ²	ϕ	-	0.65				
Strength reduction factor for shear ²	ϕ	-	0.60				

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Values provided for common rod material types based on specified strengths and calculated in accordance with ACI 318-14 Eq. (17.4.1.2) or Eq. (17.5.1.2b) or ACI 318-11 Eq. (D-2) and Eq. (D-29), as applicable. Other material specifications are admissible.

² For use with the load combinations of ACI 318-14 5.3 or ACI 318-11 9.2, as applicable, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable.

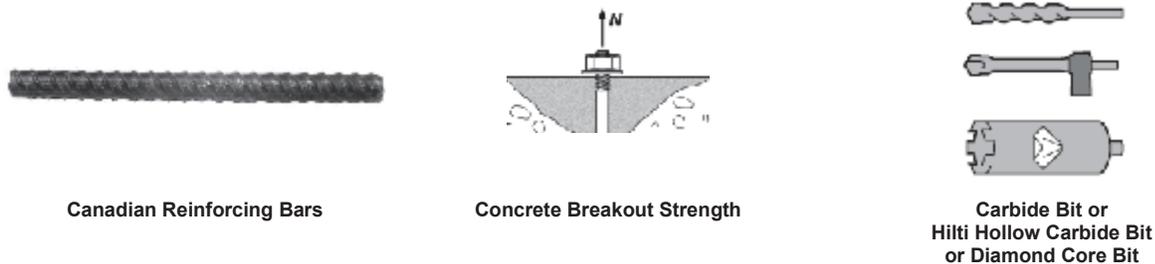


TABLE 23—CONCRETE BREAKOUT DESIGN INFORMATION FOR CANADIAN METRIC REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT), OR DIAMOND CORE BIT¹

DESIGN INFORMATION	Symbol	Units	Nominal reinforcing bar size				
			10 M	15 M	20 M	25 M	30 M
Effectiveness factor for cracked concrete	$k_{c,cr}$	SI (in-lb)	7.1 (17)				
Effectiveness factor for uncracked concrete	$k_{c,uncr}$	SI (in-lb)	10 (24)				
Minimum Embedment	$h_{ef,min}$	mm (in.)	60 (2.4)	80 (3.1)	90 (3.5)	101 (4.0)	120 (4.7)
Maximum Embedment	$h_{ef,max}$	mm (in.)	226 (8.9)	320 (12.6)	390 (15.4)	504 (19.8)	598 (23.5)
Min. bar spacing ³	s_{min}	mm (in.)	57 (2.2)	80 (3.1)	98 (3.8)	126 (5.0)	150 (5.9)
Min. edge distance ³	c_{min}	mm (in.)	5d; or see Section 4.1.9 of this report for design with reduced minimum edge distances				
Minimum concrete thickness	h_{min}	mm (in.)	$h_{ef} + 30$ ($h_{ef} + 1\frac{1}{4}$)	$h_{ef} + 2d_o^{(4)}$			
Critical edge distance – splitting (for uncracked concrete)	c_{ac}	-	See Section 4.1.10 of this report.				
Strength reduction factor for tension, concrete failure modes, Condition B ²	ϕ	-	0.65				
Strength reduction factor for shear, concrete failure modes, Condition B ²	ϕ	-	0.70				

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Additional setting information is described in Figure 9, Manufacturers Printed Installation Instructions (MPII).

² Values provided for post-installed anchors installed under Condition B without supplementary reinforcement.

³ For installations with $1\frac{3}{4}$ -inch edge distance, refer to Section 4.1.9 for spacing and maximum torque requirements.

⁴ d_o = hole diameter.

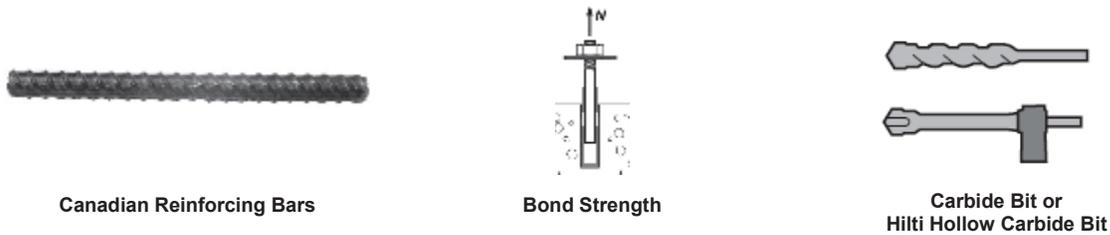


TABLE 24—BOND STRENGTH DESIGN INFORMATION FOR CANADIAN METRIC REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT) ¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size					
					10M	15M	20M	25M	30M	
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	80 (3.1)	90 (3.5)	101 (4.0)	120 (4.7)	
Maximum Embedment			$h_{ef,max}$	mm (in.)	226 (8.9)	320 (12.6)	390 (15.4)	504 (19.8)	598 (23.5)	
Dry concrete and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	9.4 (1,360)	9.6 (1,390)	9.7 (1,410)	9.8 (1,420)	9.5 (1,380)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	12.1 (1,760)	11.8 (1,720)	11.7 (1,690)	11.3 (1,650)	11.1 (1,610)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	6.5 (940)	6.6 (960)	6.7 (970)	6.8 (980)	6.5 (950)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	8.4 (1,210)	8.2 (1,190)	8.0 (1,170)	7.8 (1,140)	7.7 (1,110)	
	Anchor Category			-	-	1	1	1	1	1
	Strength Reduction factor			ϕ_d, ϕ_{ws}	-	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	6.9 (1,010)	7.2 (1,040)	7.3 (1,060)	7.4 (1,080)	7.3 (1,060)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	8.9 (1,300)	8.9 (1,280)	8.8 (1,270)	8.6 (1,250)	8.5 (1,240)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	4.8 (700)	5.0 (720)	5.0 (730)	5.1 (740)	5.0 (730)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	6.2 (900)	6.1 (890)	6.1 (880)	6.0 (860)	5.9 (850)	
	Anchor Category			-	-	3	3	3	3	3
	Strength Reduction factor			ϕ_{wf}	-	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	6.1 (880)	6.3 (920)	6.5 (940)	6.8 (980)	6.6 (960)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	7.8 (1,130)	7.8 (1,140)	7.8 (1,140)	7.8 (1,140)	7.8 (1,130)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	4.2 (610)	4.4 (630)	4.5 (650)	4.7 (680)	4.6 (660)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	5.4 (780)	5.4 (790)	5.4 (780)	5.4 (780)	5.4 (780)	
	Anchor Category			-	-	3	3	3	3	3
	Strength Reduction factor			ϕ_{sw}	-	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.9	0.9	0.9	0.9	0.9	

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).
 Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).
 Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

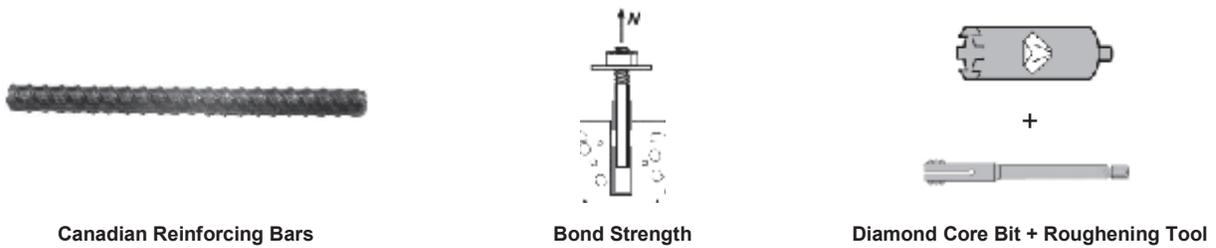


TABLE 25A—BOND STRENGTH DESIGN INFORMATION FOR CANADIAN METRIC REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size		
					15M	20M	
Minimum Embedment			$h_{ef,min}$	mm (in.)	80 (3.1)	90 (3.5)	
Maximum Embedment			$h_{ef,max}$	mm (in.)	320 (12.6)	390 (15.4)	
Dry and Water Saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	6.7 (970)	6.8 (985)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	11.8 (1,720)	11.7 (1,690)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	MPa (psi)	4.6 (670)	4.7 (680)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	8.2 (1,190)	8.0 (1,170)	
	Anchor Category			-		1	1
	Strength Reduction factor			ϕ_d, ϕ_{ws}		0.65	0.65
Reduction for seismic tension			$\alpha_{N,seis}$	-	0.9	0.9	

For SI: 1 inch \approx 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi \leq $f'_c \leq$ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

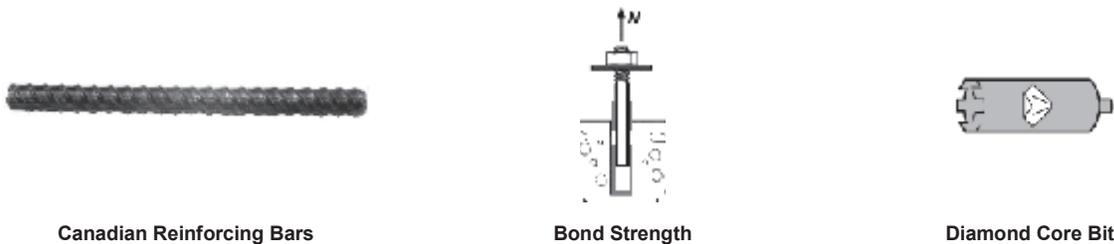


TABLE 25B—BOND STRENGTH DESIGN INFORMATION FOR CANADIAN METRIC REINFORCING BARS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal reinforcing bar size				
					10M	15M	20M	25M	30M
Minimum Embedment			$h_{ef,min}$	mm (in.)	60 (2.4)	80 (3.1)	90 (3.5)	101 (4.0)	120 (4.7)
Maximum Embedment			$h_{ef,max}$	mm (in.)	226 (8.9)	320 (12.6)	390 (15.4)	504 (19.8)	598 (23.5)
Dry and Water Saturated concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)	8.0 (1,150)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	MPa (psi)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)	5.5 (800)
	Anchor Category			-		2	3	3	3
	Strength Reduction factor			ϕ_d, ϕ_{ws}	-	0.55	0.45	0.45	0.45

For SI: 1 inch \approx 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.



Fractional and Metric HIS-N and HIS-RN Internal Threaded Insert

Steel Strength

TABLE 26—STEEL DESIGN INFORMATION FOR FRACTIONAL AND METRIC HIS-N AND HIS-RN THREADED INSERTS¹

DESIGN INFORMATION	Symbol	Units	Nominal Bolt/Cap Screw Diameter (in.) Fractional				Units	Nominal Bolt/Cap Screw Diameter (mm) Metric					
			³ / ₈	¹ / ₂	⁵ / ₈	³ / ₄		8	10	12	16	20	
HIS Insert O.D.	<i>D</i>	in. (mm)	0.65 (16.5)	0.81 (20.5)	1.00 (25.4)	1.09 (27.6)	mm (in.)	12.5 (0.49)	16.5 (0.65)	20.5 (0.81)	25.4 (1.00)	27.6 (1.09)	
HIS insert length	<i>l</i>	in. (mm)	4.33 (110)	4.92 (125)	6.69 (170)	8.07 (205)	mm (in.)	90 (3.54)	110 (4.33)	125 (4.92)	170 (6.69)	205 (8.07)	
Bolt effective cross-sectional area	<i>A_{se}</i>	in. ² (mm ²)	0.0775 (50)	0.1419 (92)	0.2260 (146)	0.3345 (216)	mm ² (in. ²)	36.6 (0.057)	58 (0.090)	84.3 (0.131)	157 (0.243)	245 (0.380)	
HIS insert effective cross-sectional area	<i>A_{insert}</i>	in. ² (mm ²)	0.178 (115)	0.243 (157)	0.404 (260)	0.410 (265)	mm ² (in. ²)	51.5 (0.080)	108 (0.167)	169.1 (0.262)	256.1 (0.397)	237.6 (0.368)	
ASTM A193 B7	Nominal steel strength – ASTM A193 B7 ³ bolt/cap screw	<i>N_{sa}</i>	lb (kN)	9,690 (43.1)	17,740 (78.9)	28,250 (125.7)	41,815 (186.0)	kN (lb)	-	-	-	-	-
		<i>V_{sa}</i>	lb (kN)	5,815 (25.9)	10,645 (47.3)	16,950 (75.4)	25,090 (111.6)	kN (lb)	-	-	-	-	-
	Nominal steel strength – HIS-N insert	<i>N_{sa}</i>	lb (kN)	12,645 (56.3)	17,250 (76.7)	28,680 (127.6)	29,145 (129.7)	kN (lb)	-	-	-	-	-
ASTM A193 Grade B8M SS	Nominal steel strength – ASTM A193 Grade B8M SS bolt/cap screw	<i>N_{sa}</i>	lb (kN)	8,525 (37.9)	15,610 (69.4)	24,860 (110.6)	36,795 (163.7)	kN (lb)	-	-	-	-	-
		<i>V_{sa}</i>	lb (kN)	5,115 (22.8)	9,365 (41.7)	14,915 (66.3)	22,075 (98.2)	kN (lb)	-	-	-	-	-
	Nominal steel strength – HIS-RN insert	<i>N_{sa}</i>	lb (kN)	18,065 (80.4)	24,645 (109.6)	40,970 (182.2)	41,635 (185.2)	kN (lb)	-	-	-	-	-
ISO 898-1 Class 8.8	Nominal steel strength – ISO 898-1 Class 8.8 bolt/cap screw	<i>N_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	29.5 (6,582)	46.5 (10,431)	67.5 (15,161)	125.5 (28,236)	196.0 (44,063)
		<i>V_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	17.5 (3,949)	28.0 (6,259)	40.5 (9,097)	75.5 (16,942)	117.5 (26,438)
	Nominal steel strength – HIS-N insert	<i>N_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	25.0 (5,669)	53.0 (11,894)	83.0 (18,628)	125.5 (28,210)	116.5 (26,176)
ISO 3506-1 Class A4-70 Stainless	Nominal steel strength – ISO 3506-1 Class A4-70 Stainless bolt/cap screw	<i>N_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	25.5 (5,760)	40.5 (9,127)	59.0 (13,266)	110.0 (24,706)	171.5 (38,555)
		<i>V_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	15.5 (3,456)	24.5 (5,476)	35.5 (7,960)	66.0 (14,824)	103.0 (23,133)
	Nominal steel strength – HIS-RN insert	<i>N_{sa}</i>	lb (kN)	-	-	-	-	kN (lb)	36.0 (8,099)	75.5 (16,991)	118.5 (26,612)	179.5 (40,300)	166.5 (37,394)
Reduction for seismic shear	$\alpha_{V,seis}$	-	0.94				-	0.94					
Strength reduction factor for tension ²	ϕ	-	0.65				-	0.65					
Strength reduction factor for shear ²	ϕ	-	0.60				-	0.60					

For **SI**: 1 inch = 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Values provided for common rod material types based on specified strengths and calculated in accordance with ACI 318-14 Eq. (17.4.1.2) or Eq. (17.5.1.2b) or ACI 318-11 Eq. (D-2) and Eq. (D-29), as applicable. Nuts and washers must be appropriate for the rod.
² For use with the load combinations of ACI 318-14 5.3 or ACI 318-11 9.2, as applicable, as set forth in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable. Values correspond to a brittle steel element for the HIS insert.
³ For the calculation of the design steel strength in tension and shear for the bolt or screw, the ϕ factor for ductile steel failure according to ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable, can be used.

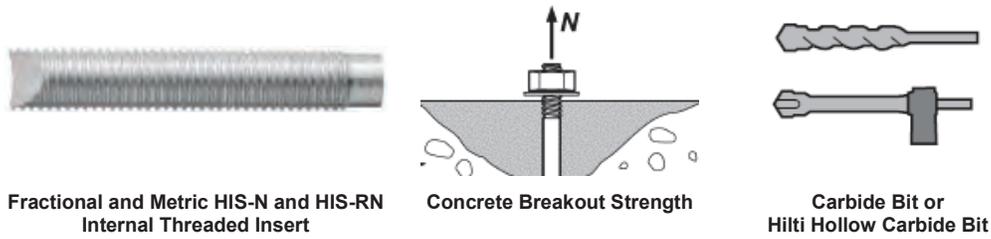


TABLE 27—CONCRETE BREAKOUT DESIGN INFORMATION FOR FRACTIONAL AND METRIC HILTI HIS-N AND HIS-RN INSERTS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION	Symbol	Units	Nominal Bolt/Cap Screw Diameter (in.) Fractional				Units	Nominal Bolt/Cap Screw Diameter (mm) Metric				
			³ / ₈	¹ / ₂	⁵ / ₈	³ / ₄		8	10	12	16	20
Effectiveness factor for cracked concrete	$k_{c,cr}$	in-lb (SI)	17 (7.1)				SI (in-lb)	7.1 (17)				
Effectiveness factor for uncracked concrete	$k_{c,uncr}$	in-lb (SI)	24 (10)				SI (in-lb)	10 (24)				
Effective embedment depth	h_{ef}	in. (mm)	4 ³ / ₈ (110)	5 (125)	6 ³ / ₄ (170)	8 ¹ / ₈ (205)	mm (in.)	90 (3.5)	110 (4.3)	125 (4.9)	170 (6.7)	205 (8.1)
Min. anchor spacing ³	s_{min}	in. (mm)	3 ¹ / ₄ (83)	4 (102)	5 (127)	5 ¹ / ₂ (140)	mm (in.)	63 (2.5)	83 (3.25)	102 (4.0)	127 (5.0)	140 (5.5)
Min. edge distance ³	c_{min}	in. (mm)	3 ¹ / ₄ (83)	4 (102)	5 (127)	5 ¹ / ₂ (140)	mm (in.)	63 (2.5)	83 (3.25)	102 (4.0)	127 (5.0)	140 (5.5)
Minimum concrete thickness	h_{min}	in. (mm)	5.9 (150)	6.7 (170)	9.1 (230)	10.6 (270)	mm (in.)	120 (4.7)	150 (5.9)	170 (6.7)	230 (9.1)	270 (10.6)
Critical edge distance – splitting (for uncracked concrete)	c_{ac}	-	See Section 4.1.10 of this report				-	See Section 4.1.10 of this report				
Strength reduction factor for tension, concrete failure modes, Condition B ²	ϕ	-	0.65				-	0.65				
Strength reduction factor for shear, concrete failure modes, Condition B ²	ϕ	-	0.70				-	0.70				

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897MPa.
For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Additional setting information is described in Figure 9A, Manufacturers Printed Installation Instructions (MPII).

² Values provided for post-installed anchors installed under Condition B without supplementary reinforcement as defined in ACI 318-14 17.3.3 or ACI 318-11 D.4.3, as applicable.

³ For installations with 1³/₄-inch edge distance, refer to Section 4.1.9 for spacing and maximum torque requirements.

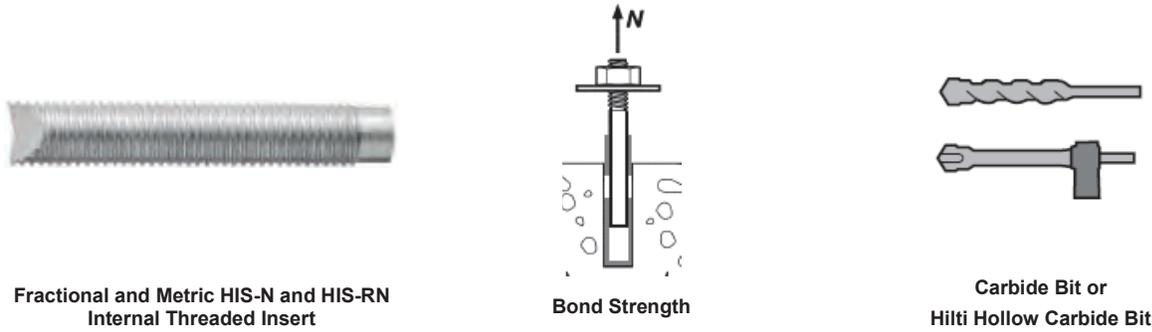


TABLE 28—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL AND METRIC HILTI HIS-N AND HIS-RN INSERTS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT (OR HILTI HOLLOW CARBIDE DRILL BIT)¹

DESIGN INFORMATION			Symbol	Units	Nominal bolt/cap screw diameter (in.)				Units	Nominal bolt/cap screw diameter (mm)				
					3/8	1/2	5/8	3/4		8	10	12	16	20
Embedment			h_{ef}	in. (mm)	4 ^{3/8} (110)	5 (125)	6 ^{3/4} (170)	8 ^{1/8} (205)	mm (in.)	90 (3.5)	110 (4.3)	125 (4.9)	170 (6.7)	205 (8.1)
Dry concrete and Water saturated concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	1,070 (7.4)	MPa (psi)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)	7.4 (1,070)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,790 (12.3)	1,790 (12.3)	1,790 (12.3)	1,790 (12.3)	MPa (psi)	12.3 (1,790)	12.3 (1,790)	12.3 (1,790)	12.3 (1,790)	12.3 (1,790)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	740 (5.1)	740 (5.1)	740 (5.1)	740 (5.1)	MPa (psi)	5.1 (740)	5.1 (740)	5.1 (740)	5.1 (740)	5.1 (740)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,240 (8.5)	1,240 (8.5)	1,240 (8.5)	1,240 (8.5)	MPa (psi)	8.5 (1,240)	8.5 (1,240)	8.5 (1,240)	8.5 (1,240)	8.5 (1,240)
	Anchor Category		-	-	1	1	1	1	-	1	1	1	1	1
	Strength Reduction factor		ϕ_a, ϕ_{ws}	-	0.65	0.65	0.65	0.65	-	0.65	0.65	0.65	0.65	0.65
Water-filled hole	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	800 (5.5)	810 (5.6)	820 (5.7)	820 (5.7)	MPa (psi)	5.5 (790)	5.5 (800)	5.6 (810)	5.7 (820)	5.7 (820)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,340 (9.2)	1,350 (9.3)	1,370 (9.5)	1,380 (9.5)	MPa (psi)	9.1 (1,330)	9.2 (1,340)	9.3 (1,350)	9.5 (1,370)	9.5 (1,380)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	550 (3.8)	560 (3.8)	570 (3.9)	570 (3.9)	MPa (psi)	3.8 (550)	3.8 (550)	3.8 (560)	3.9 (570)	3.9 (570)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	920 (6.4)	930 (6.4)	950 (6.5)	950 (6.6)	MPa (psi)	6.3 (920)	6.4 (920)	6.4 (930)	6.5 (950)	6.6 (950)
	Anchor Category		-	-	3	3	3	3	-	3	3	3	3	3
	Strength Reduction factor		ϕ_{wf}	-	0.45	0.45	0.45	0.45	-	0.45	0.45	0.45	0.45	0.45
Submerged concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	710 (4.9)	720 (5.0)	750 (5.1)	750 (5.2)	MPa (psi)	4.8 (700)	4.9 (710)	5.0 (720)	5.1 (750)	5.2 (750)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,190 (8.2)	1,210 (8.4)	1,250 (8.6)	1,260 (8.7)	MPa (psi)	8.0 (1,160)	8.2 (1,190)	8.4 (1,210)	8.6 (1,250)	8.7 (1,260)
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	490 (3.4)	500 (3.4)	510 (3.5)	520 (3.6)	MPa (psi)	3.3 (480)	3.4 (490)	3.4 (500)	3.5 (510)	3.6 (520)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	820 (5.6)	840 (5.8)	860 (5.9)	870 (6.0)	MPa (psi)	5.5 (800)	5.6 (820)	5.8 (840)	5.9 (860)	6.0 (870)
	Anchor Category		-	-	3	3	3	3	-	3	3	3	3	3
	Strength Reduction factor		ϕ_{uw}	-	0.45	0.45	0.45	0.45	-	0.45	0.45	0.45	0.45	0.45
Reduction for seismic tension			$\alpha_{N,seis}$	-	1	1	1	1	-	1	1	1	1	1

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength $f'_c = 2,500$ psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f'_c , between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of $(f'_c / 2,500)^{0.25}$ for uncracked concrete [For SI: $(f'_c / 17.2)^{0.25}$] and $(f'_c / 2,500)^{0.15}$ for cracked concrete [For SI: $(f'_c / 17.2)^{0.15}$]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C). Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

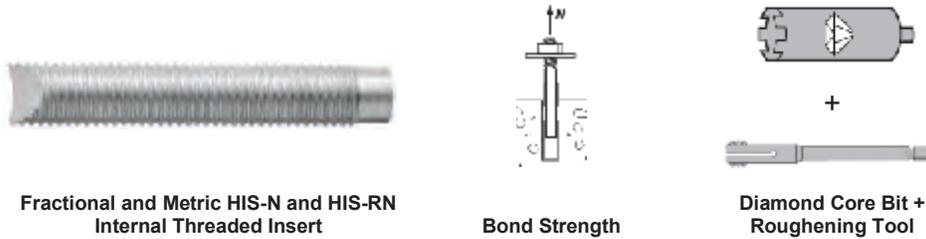


TABLE 29—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL AND METRIC HILTI HIS-N AND HIS-RN INSERTS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL¹

DESIGN INFORMATION			Symbol	Units	Nominal bolt/cap screw diameter (in.)			Units	Nominal bolt/cap screw diameter (mm)			
					1/2	5/8	3/4		12	16	20	
Embedment			h_{ef}	in. (mm)	5 (125)	6 3/4 (170)	8 1/8 (205)	mm (in.)	125 (4.9)	170 (6.7)	205 (8.1)	
Dry concrete and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	750 (5.2)	750 (5.2)	750 (5.2)	MPa (psi)	5.2 (750)	5.2 (750)	5.2 (750)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,790 (12.3)	1,790 (12.3)	1,790 (12.3)	MPa (psi)	12.3 (1,790)	12.3 (1,790)	12.3 (1,790)	
	Temperature range B ²	Characteristic bond strength in cracked concrete	$\tau_{k,cr}$	psi (MPa)	515 (3.6)	515 (3.6)	515 (3.6)	MPa (psi)	3.6 (515)	3.6 (515)	3.6 (515)	
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,240 (8.5)	1,240 (8.5)	1,240 (8.5)	MPa (psi)	8.5 (1,240)	8.5 (1,240)	8.5 (1,240)	
	Anchor Category			-	-	1	1	1	-	1	1	1
	Strength Reduction factor			ϕ_c, ϕ_{ws}	-	0.65	0.65	0.65	-	0.65	0.65	0.65
Reduction for seismic tension			$\alpha_{N,seis}$	-	1	1	1	-	1	1	1	

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength in the range 2,500 psi ≤ f_c ≤ 8,000 psi [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

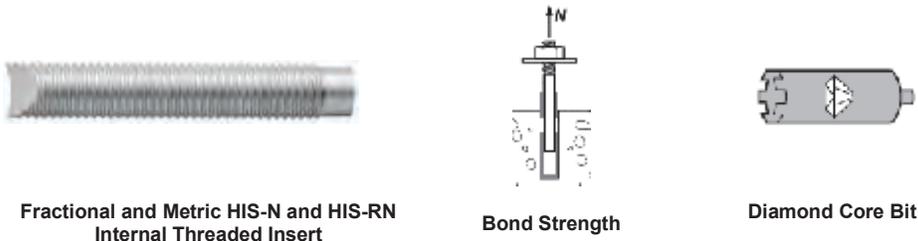


TABLE 30—BOND STRENGTH DESIGN INFORMATION FOR FRACTIONAL AND METRIC HILTI HIS-N AND HIS-RN INSERTS IN HOLES CORE DRILLED WITH A DIAMOND CORE BIT¹

DESIGN INFORMATION			Symbol	Units	Nominal bolt/cap screw diameter (in.)				Units	Nominal bolt/cap screw diameter (mm)				
					3/8	1/2	5/8	3/4		8	10	12	16	20
Embedment			h_{ef}	in. (mm)	4 7/8 (110)	5 (125)	6 3/4 (170)	8 1/8 (205)	mm (in.)	90 (3.5)	110 (4.3)	125 (4.9)	170 (6.7)	205 (8.1)
Dry concrete and Water Saturated Concrete	Temperature range A ²	Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	1,200 (8.3)	1,200 (8.3)	1,200 (8.3)	1,200 (8.3)	MPa (psi)	8.3 (1,200)	8.3 (1,200)	8.3 (1,200)	8.3 (1,200)	8.3 (1,200)
		Characteristic bond strength in uncracked concrete	$\tau_{k,uncr}$	psi (MPa)	830 (5.7)	830 (5.7)	830 (5.7)	830 (5.7)	MPa (psi)	5.7 (830)	5.7 (830)	5.7 (830)	5.7 (830)	5.7 (830)
	Anchor Category			-	-	3	3	3	-	2	3	3	3	3
	Strength Reduction factor			ϕ_c, ϕ_{ws}	-	0.45	0.45	0.45	0.45	-	0.55	0.45	0.45	0.45

For SI: 1 inch ≅ 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.

For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Bond strength values correspond to concrete compressive strength f_c = 2,500 psi (17.2 MPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1]. For concrete compressive strength, f_c, between 2,500 psi (17.2 MPa) and 8,000 psi (55.2 MPa), the tabulated characteristic bond strength may be increased by a factor of (f_c / 2,500)^{0.25} for uncracked concrete [For SI: (f_c / 17.2)^{0.25}]. See Section 4.1.4 of this report for bond strength determination.

² Temperature range A: Maximum short term temperature = 130°F (55°C), Maximum long term temperature = 110°F (43°C).

Temperature range B: Maximum short term temperature = 176°F (80°C), Maximum long term temperature = 110°F (43°C).

Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperatures are roughly constant over significant periods of time.

TABLE 31—DEVELOPMENT LENGTH FOR U.S. CUSTOMARY UNIT REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT OR HILTI HOLLOW CARBIDE BIT OR CORE DRILLED WITH A DIAMOND CORE BIT OR A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL^{1,2,4,5,6}

DESIGN INFORMATION	Symbol	Criteria Section of Reference Standard	Units	Bar Size							
				#3	#4	#5	#6	#7	#8	#9	#10
Nominal reinforcing bar diameter	d_b	ASTM A615/A706	in. (mm)	0.375 (9.5)	0.500 (12.7)	0.625 (15.9)	0.750 (19.1)	0.875 (22.2)	1.000 (25.4)	1.125 (28.6)	1.250 (31.8)
Nominal bar area	A_b	ASTM A615/A706	in ² (mm ²)	0.11 (71.3)	0.20 (126.7)	0.31 (197.9)	0.44 (285.0)	0.60 (387.9)	0.79 (506.7)	1.00 (644.7)	1.27 (817.3)
Development length for $f_y = 60$ ksi and $f'_c = 2,500$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	in. (mm)	12.0 (304.8)	14.4 (365.8)	18.0 (457.2)	21.6 (548.6)	31.5 (800.1)	36.0 (914.4)	40.5 (1028.7)	45.0 (1143.0)
Development length for $f_y = 60$ ksi and $f'_c = 4,000$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	in. (mm)	12.0 (304.8)	12.0 (304.8)	14.2 (361.4)	17.1 (433.7)	24.9 (632.5)	28.5 (722.9)	32.0 (812.8)	35.6 (904.2)

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Development lengths valid for static, wind, and earthquake loads (SDC A and B).
² Development lengths in SDC C through F must comply with ACI 318-14 Chapter 18 or ACI 318-11 Chapter 21, as applicable, and section 4.2.4 of this report.
³ For sand-lightweight concrete, increase development length by 33%, unless the provisions of ACI 318-14 25.4.2.4 or ACI 318-11 12.2.4 (d), as applicable, are met to permit $\lambda > 0.75$.
⁴ $(\frac{c_b + k_{tr}}{d_b}) = 2.5, \psi_t = 1.0, \psi_e = 1.0, \psi_s = 0.8$ for $d_b \leq \#6, 1.0$ for $d_b > \#6$
⁵ Minimum f'_c of 24 MPa is required under ADIBC Appendix L, Section 5.1.1.
⁶ Calculations may be performed for other steel grades per ACI 318-11 Chapter 12 or ACI 318-14 Chapter 25.

TABLE 32—DEVELOPMENT LENGTH FOR EU METRIC REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT OR HILTI HOLLOW CARBIDE BIT OR CORE DRILLED WITH A DIAMOND CORE BIT OR A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL^{1,2,4,5,6}

DESIGN INFORMATION	Symbol	Criteria Section of Reference Standard	Units	Bar Size					
				10	12	16	20	25	32
Nominal reinforcing bar diameter	d_b	BS4449: 2005	mm (in.)	10 (0.394)	12 (0.472)	16 (0.630)	20 (0.787)	25 (0.984)	32 (1.260)
Nominal bar area	A_b	BS 4449: 2005	mm ² (in ²)	78.5 (0.12)	113.1 (0.18)	201.1 (0.31)	314.2 (0.49)	490.9 (0.76)	804.2 (1.25)
Development length for $f_y = 72.5$ ksi and $f'_c = 2,500$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	mm (in.)	348 (13.7)	417 (16.4)	556 (21.9)	871 (34.3)	1087 (42.8)	1392 (54.8)
Development length for $f_y = 72.5$ ksi and $f'_c = 4,000$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	mm (in.)	305 (12.0)	330 (13.0)	439 (17.3)	688 (27.1)	859 (33.8)	1100 (43.3)

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Development lengths valid for static, wind, and earthquake loads (SDC A and B).
² Development lengths in SDC C through F must comply with ACI 318-14 Chapter 18 or ACI 318-11 Chapter 21 and section 4.2.4 of this report.
³ For sand-lightweight concrete, increase development length by 33%, unless the provisions of ACI 318-14 25.4.2.4 or ACI 318-11 12.2.4 (d), as applicable, are met to permit $\lambda > 0.75$.
⁴ $(\frac{c_b + k_{tr}}{d_b}) = 2.5, \psi_t = 1.0, \psi_e = 1.0, \psi_s = 0.8$ for $d_b < 20$ mm, 1.0 for $d_b \geq 20$ mm
⁵ Minimum f'_c of 24 MPa is required under ADIBC Appendix L, Section 5.1.1.
⁶ Calculations may be performed for other steel grades per ACI 318-11 Chapter 12 or ACI 318-14 Chapter 25.

TABLE 33—DEVELOPMENT LENGTH FOR CANADIAN REINFORCING BARS IN HOLES DRILLED WITH A HAMMER DRILL AND CARBIDE BIT OR HILTI HOLLOW CARBIDE BIT OR CORE DRILLED WITH A DIAMOND CORE BIT OR A DIAMOND CORE BIT AND ROUGHENED WITH A HILTI ROUGHENING TOOL^{1,2,4,5,6}

DESIGN INFORMATION	Symbol	Criteria Section of Reference Standard	Units	Bar Size				
				10M	15M	20M	25M	30M
Nominal reinforcing bar diameter	d_b	CAN/CSA-G30.18 Gr.400	mm (in.)	11.3 (0.445)	16.0 (0.630)	19.5 (0.768)	25.2 (0.992)	29.9 (1.177)
Nominal bar area	A_b	CAN/CSA-G30.18 Gr.400	mm ² (in ²)	100.3 (0.16)	201.1 (0.31)	298.6 (0.46)	498.8 (0.77)	702.2 (1.09)
Development length for $f_y = 58$ ksi and $f_c = 2,500$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	mm (in.)	315 (12.4)	445 (17.5)	678 (26.7)	876 (34.5)	1,041 (41.0)
Development length for $f_y = 58$ ksi and $f_c = 4,000$ psi (normal weight concrete) ³	l_d	ACI 318 12.2.3	mm (in.)	305 (12.0)	353 (13.9)	536 (21.1)	693 (27.3)	823 (32.4)

For SI: 1 inch \equiv 25.4 mm, 1 lbf = 4.448 N, 1 psi = 0.006897 MPa.
 For pound-inch units: 1 mm = 0.03937 inches, 1 N = 0.2248 lbf, 1 MPa = 145.0 psi

¹ Development lengths valid for static, wind, and earthquake loads (SDC A and B).
² Development lengths in SDC C through F must comply with ACI 318-14 Chapter 18 or ACI 318-11 Chapter 21 and section 4.2.4 of this report.
³ For sand-lightweight concrete, increase development length by 33%, unless the provisions of ACI 318-14 25.4.2.4 or ACI 318-11 12.2.4 (d), as applicable, are met to permit $\lambda > 0.75$.
⁴ $(\frac{c_b + K_{tr}}{d_b}) = 2.5, \psi_t = 1.0, \psi_e = 1.0, \psi_s = 0.8$ for $d_b < 20M, 1.0$ for $d_b \geq 20M$
⁵ Minimum f_c of 24 MPa is required under ADIBC Appendix L, Section 5.1.1.
⁶ Calculations may be performed for other steel grades per ACI 318-11 Chapter 12 or ACI 318-14 Chapter 25.

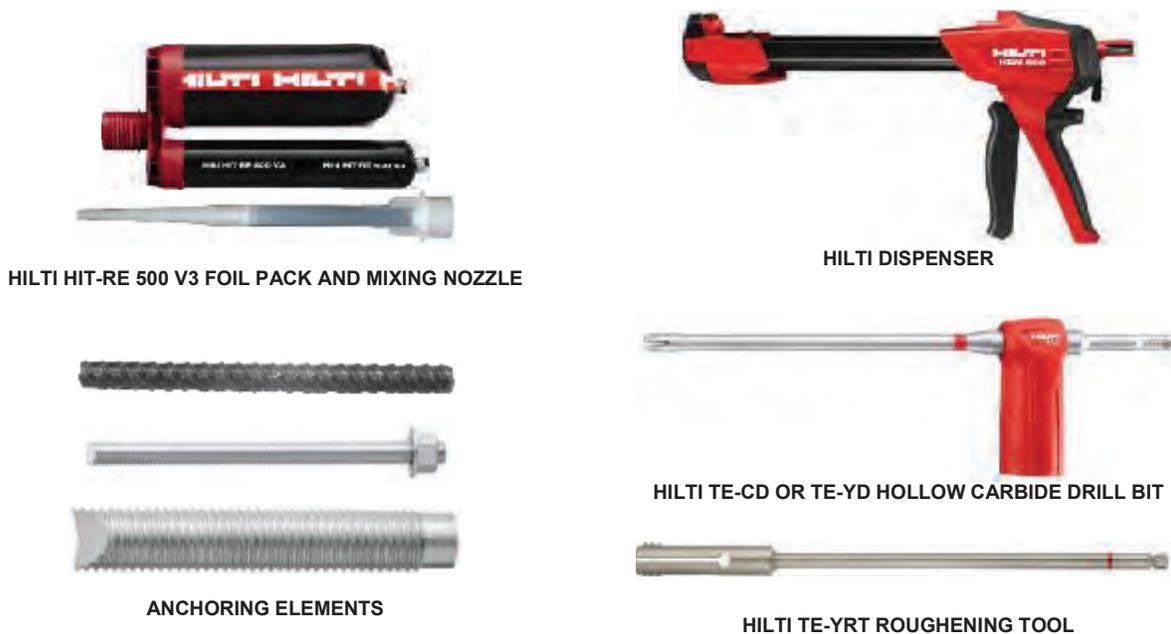


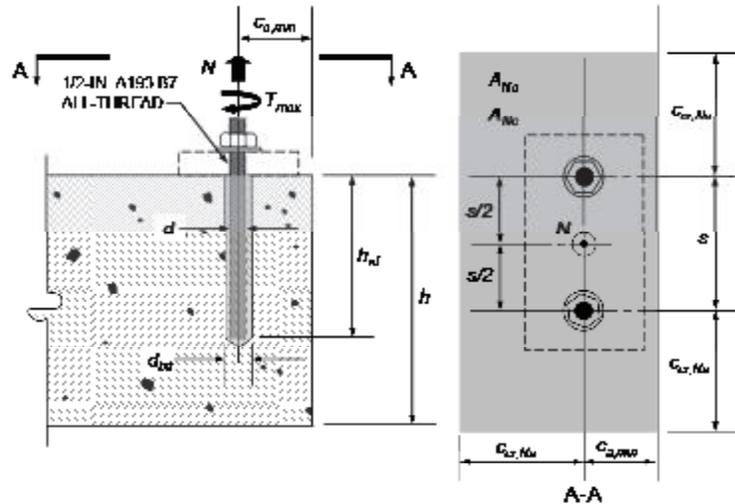
FIGURE 6—HILTI HIT-RE 500 V3 ANCHORING SYSTEM

Specifications / Assumptions:

ASTM A193 Grade B7 threaded rod
 Normal weight concrete, $f'_c = 4,000$ psi
 Seismic Design Category (SDC) B
 No supplementary reinforcing in accordance with ACI 318-14 2.3 will be provided.
 Assume maximum short term (diurnal) base material temperature $\leq 130^\circ$ F.
 Assume maximum long term base material temperature $\leq 110^\circ$ F.
 Assume installation in dry concrete and hammer-drilled holes.
 Assume concrete will remain uncracked for service life of anchorage.

Dimensional Parameters:

- $h_{ef} = 9.0$ in.
- $s = 4.0$ in.
- $c_{a,min} = 2.5$ in.
- $h = 12.0$ in.
- $d = 1/2$ in.



Calculation for the 2015 IBC in accordance with ACI 318-14 Chapter 17 and this report	ACI 318-14 Code Ref.	Report Ref.
<p>Step 1. Check minimum edge distance, anchor spacing and member thickness:</p> <p>$c_{min} = 2.5 \text{ in.} \leq c_{a,min} = 2.5 \text{ in.} \therefore \text{OK}$</p> <p>$s_{min} = 2.5 \text{ in.} \leq s = 4.0 \text{ in.} \therefore \text{OK}$</p> <p>$h_{min} = h_{ef} + 1.25 \text{ in.} = 9.0 + 1.25 = 10.25 \text{ in.} \leq h = 12.0 \therefore \text{OK}$</p> <p>$h_{ef,min} \leq h_{ef} \leq h_{ef,max} = 2.75 \text{ in.} \leq 9 \text{ in.} \leq 10 \text{ in.} \therefore \text{OK}$</p>	-	Table 7
<p>Step 2. Check steel strength in tension:</p> <p>Single Anchor: $N_{sa} = A_{se} \cdot f_{uta} = 0.1419 \text{ in}^2 \cdot 125,000 \text{ psi} = 17,738 \text{ lb.}$</p> <p>Anchor Group: $\phi N_{sa} = \phi \cdot n \cdot A_{se} \cdot f_{uta} = 0.75 \cdot 2 \cdot 17,738 \text{ lb.} = 26,606 \text{ lb.}$</p> <p>Or using Table 11: $\phi N_{sa} = 0.75 \cdot 2 \cdot 17,735 \text{ lb.} = 26,603 \text{ lb.}$</p>	17.4.1.2 Eq. (17.4.1.2)	Table 2 Table 6A
<p>Step 3. Check concrete breakout strength in tension:</p> <p>$N_{cbg} = \frac{A_{Nc}}{A_{Nc0}} \cdot \psi_{ec,N} \cdot \psi_{ed,N} \cdot \psi_{c,N} \cdot \psi_{cp,N} \cdot N_b$</p> <p>$A_{Nc} = (3 \cdot h_{ef} + s)(1.5 \cdot h_{ef} + c_{a,min}) = (3 \cdot 9 + 4)(13.5 + 2.5) = 496 \text{ in}^2$</p> <p>$A_{Nc0} = 9 \cdot h_{ef}^2 = 729 \text{ in}^2$</p> <p>$\psi_{ec,N} = 1.0$ no eccentricity of tension load with respect to tension-loaded anchors</p> <p>For $c_{a,min} < 1.5h_{ef}$ $\psi_{ed,N} = 0.7 + 0.3 \cdot \frac{c_{a,min}}{1.5h_{ef}} = 0.7 + 0.3 \cdot \frac{2.5}{1.5 \cdot 9} = 0.76$</p> <p>$\psi_{c,N} = 1.0$ uncracked concrete assumed ($k_{c,uncr} = 24$)</p> <p>Determine c_{ac}: From Table 11: $\tau_{uncr} = 2,300$ psi</p> <p>$\tau_{uncr} = \frac{k_{c,uncr}}{\pi \cdot d} \sqrt{h_{ef} \cdot f'_c} = \frac{24}{\pi \cdot 0.5} \sqrt{9 \cdot 4,000} = 2,899 \text{ psi} > 2,300 \text{ psi} \therefore \text{use } 2,300 \text{ psi}$</p> <p>$c_{ac} = h_{ef} \cdot \left(\frac{\tau_{uncr}}{1,160} \right)^{0.4} \left[3.1 - 0.7 \frac{h}{h_{ef}} \right] = 9 \cdot \left(\frac{2,300 \left(\frac{4,000}{2,500} \right)^{0.25}}{1,160} \right)^{0.4} \left[3.1 - 0.7 \frac{12}{9} \right] = 26.9 \text{ in.}$</p> <p>For $c_{a,min} < c_{ac}$ $\psi_{cp,N} = \frac{\max\{c_{a,min}; 1.5 h_{ef}\}}{c_{ac}} = \frac{\max\{2.5; 1.5 \cdot 9\}}{26.9} = 0.50$</p> <p>$N_b = k_{c,uncr} \cdot \lambda \cdot \sqrt{f'_c} \cdot h_{ef}^{1.5} = 24 \cdot 1.0 \cdot \sqrt{4,000} \cdot 9^{1.5} = 40,983 \text{ lb.}$</p> <p>$N_{cbg} = \frac{496}{729} \cdot 1.0 \cdot 0.76 \cdot 0.50 \cdot 40,983 = 10,596 \text{ lb.}$</p> <p>$\phi N_{cbg} = 0.65 \cdot 10,596 = 6,887 \text{ lb.}$</p>	17.4.2.1 Eq. (17.4.2.1b)	-
	-	-
	17.4.2.1 and Eq. (17.4.2.1c)	-
	17.4.2.4	-
	17.4.2.5 and Eq. (17.4.2.5b)	-
	17.4.2.6	Table 7
	-	Section 4.1.10 Table 11
	17.4.2.7 and Eq. (17.4.2.7b)	-
	17.4.2.2 and Eq. (17.4.2.2a)	Table 7
	-	-
	17.3.3(c)	Table 7

FIGURE 7—SAMPLE CALCULATION

Step 4. Check bond strength in tension:		17.4.5.1 Eq. (17.4.5.1b)	-
$N_{ag} = \frac{A_{Na}}{A_{Na0}} \cdot \psi_{ec,Na} \cdot \psi_{ed,Na} \cdot \psi_{cp,Na} \cdot N_{ba}$			
$A_{Na} = (2C_{Na} + s)(C_{Na} + c_{a,min})$ $C_{Na} = 10d_a \sqrt{\frac{\tau_{uncr}}{1,100}} = 10 * 0.5 \sqrt{\frac{2,300 * (\frac{4,000}{2,500})^{0.25}}{1,100}} = 7.67 \text{ in.}$ $A_{Na} = (2 * 7.67 + 4)(7.67 + 2.5) = 196.7 \text{ in}^2$		17.4.5.1 Eq. (17.4.5.1d)	Table 11
$A_{Na0} = (2C_{Na})^2 = (2 * 7.67)^2 = 235.3 \text{ in}^2$		17.4.5.1 and Eq. (17.4.5.1c)	-
$\psi_{ec,Na} = 1.0$ no eccentricity – loading is concentric		17.4.5.3	-
$\psi_{ed,Na} = \left(0.7 + 0.3 \frac{c_{a,min}}{c_{na}}\right) = \left(0.7 + 0.3 \frac{2.5}{7.67}\right) = 0.80$		17.4.5.4	-
$\psi_{cp,Na} = \frac{\max\{c_{a,min}; c_{na}\}}{c_{ac}} = \frac{\max\{2.5; 7.67\}}{26.9} = 0.29$		17.4.5.5	-
$N_{ba} = \lambda \cdot \tau_{uncr} \cdot \pi \cdot d \cdot h_{ef} = 1.0 \cdot 2,300 \cdot \left(\frac{4,000}{2,500}\right)^{0.25} \cdot \pi \cdot 0.5 \cdot 9.0 = 36,570 \text{ lb.}$		17.4.5.2 and Eq. (17.4.5.2)	Table 11
$N_{ag} = \frac{196.7}{235.3} * 1.0 * .80 * .29 * 36,570 = 7,092 \text{ lb.}$		-	-
$\phi N_{ag} = 0.65 \cdot 6,256 = 4,610 \text{ lb.}$		17.3.3(c)	Table 11
Step 5. Determine controlling strength:			
Steel Strength	$\phi N_{sa} =$	26,603 lb.	17.3.1
Concrete Breakout Strength	$\phi N_{cbg} =$	6,887 lb.	
Bond Strength	$\phi N_{ag} =$	4,610 lb. CONTROLS	

FIGURE 7—SAMPLE CALCULATION (Continued)

Specifications / Assumptions:

Development length for column starter bars

Existing construction (E):

Foundation grade beam 24 wide x 36-in deep., 4 ksi normal weight concrete, ASTM A615 Gr. 60 reinforcement

New construction (N):

18 x 18-in. column as shown, centered on 24-in wide grade beam, 4 ksi normal weight concrete, ASTM A615 Gr. 60 reinforcement, 4 - #7 column bars

The column must resist moment and shear arising from wind loading.

Dimensional Parameters:

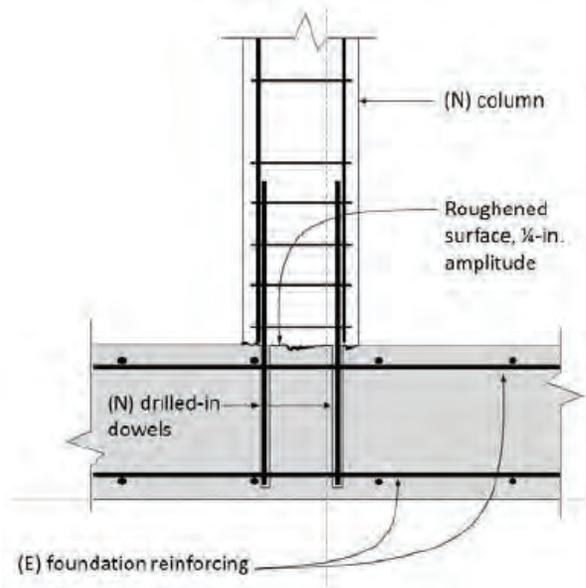
$$d_b = 0.875 \text{ in.}$$

$$\left(\frac{c_b + K_{tr}}{d_b} \right) = 2.5$$

$$\psi_t = 1.0$$

$$\psi_e = 1.0$$

$$\psi_s = 1.0$$



Calculation in accordance with ACI 318-14	ACI 318-14 Code Ref.
<p>Step 1. Determination of development length for the column bars:</p> $l_d = \left[\frac{3}{40} \cdot \frac{f_y}{\lambda \cdot \sqrt{f'_c}} \cdot \frac{\psi_t \psi_e \psi_s}{\frac{c_b + K_{tr}}{d_b}} \right] \cdot d_b = \left[\frac{3}{40} \cdot \frac{60000}{1.0 \cdot \sqrt{4000}} \cdot \frac{(1.0)(1.0)(1.0)}{2.5} \right] \cdot 0.875 = 25 \text{ in.}$ <p>Note that the confinement term K_{tr} is taken equal to the maximum value 2.5 given the edge distance and confinement condition</p>	<p>Eq. (25.4.2.3a)</p>
<p>Step 2 Detailing (not to scale)</p>	

FIGURE 8—SAMPLE CALCULATION (POST-INSTALLED REINFORCING BARS)

HILTI

HIT-RE 500 V3

Instructions for use: en
 Instrucciones de uso: es
 Istruzioni d'uso: it
 Instruções de utilização: pt

ESR

ICC
ES
 [E-3814-09 - 3814]

1			3/4" x 1 1/2" 10...40mm	2 1/4" x 10" 60...250mm		16
2			7/8" x 1 3/4" 15...40mm	2 1/4" x 7 1/2" 60...1920mm		18
3						20
4			3/4" x 1 1/2" 10...40mm	2 1/4" x 10" 60...250mm		22
5			3/4" x 1 1/2" 10...40mm	2 1/4" x 7 1/2" 60...1920mm		24
6			7/8" x 1 3/4" 15...40mm	2 1/4" x 25" 60...640mm		26
7			3/4" x 1 1/2" 14...32mm	2 1/4" x 10" 60...250mm		28

8			3/4" x 1 1/2" 14...32mm	2 1/4" x 39 3/4" 60...1000mm		30
9						32
10			3/4" x 1 1/2" 18...35mm	3 1/4" x 10" 60...250mm		34
11			3/4" x 1 1/2" 18...35mm	3 1/4" x 25" 60...630mm		36
12						38
13			3/4" x 1 1/2" 10...40mm	2 1/4" x 10" 60...250mm		40
14			7/8" x 1 3/4" 10...40mm	2 1/4" x 25" 60...640mm		42
15						44

■ Dry concrete

Water saturated concrete Washed borohole in concrete Submerged borohole in concrete

■ Threaded threaded sleeves

Unthreaded Threaded concrete Coated concrete

■ Hammer drilling

Clanked coating Hollow drill bit Roughen spot

■ Working time

Initial curing time Curing time Roughen by time

HIT-V (L-E-BCB) / HAS-E (BT) / HAS-R



HAS / HIT-V

Ø d [mm]	Ø d ₁ [mm]	h ₁ [mm]	Ø d ₂ [mm]	h ₂ [mm]	h _{tot} [mm]
6	7	23...75	7	15	20
8	9	23...10	9	30	41
10	11	33...12	11	60	81
12	13	33...15	13	100	136
16	17	33...17 1/2	17 1/2	125	168
20	21 1/2	4...20	21 1/2	150	208
25	26 1/2	5...25	26 1/2	200	271

HIT-V

Ø d [mm]	Ø d ₁ [mm]	h ₁ [mm]	Ø d ₂ [mm]	h ₂ [mm]
M8	10	60...160	8	10
M10	12	60...200	12	20
M12	14	70...240	14	40
M16	18	90...320	18	60
M20	22	100...400	22	100
M24	26	100...400	26	200
M27	30	110...510	30	270
M30	35	120...600	35	300

1 inch = 25.4mm

HIS (E-BC)

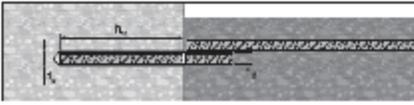


Ø d [mm]	Ø d ₁ [mm]	h ₁ [mm]	Ø d ₂ [mm]	h ₂ [mm]	h _{tot} [mm]
6	7 1/2	45	7 1/2	10...15	10...20
8	9	5	9	10...15	30...41
10	11 1/2	65	11 1/2	15	81
12	13 1/2	85	13 1/2	15	136

Ø d [mm]	Ø d ₁ [mm]	h ₁ [mm]	Ø d ₂ [mm]	h ₂ [mm]	h _{tot} [mm]
M8	10	60	8	8...20	17
M10	12	110	12	11...25	21
M12	14	125	14	11...30	41
M16	18	170	18	11...40	51
M20	22	215	22	21...50	131

FIGURE 9A—MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)

Rebar



US Rebar

Rebar Size	d (in)	l_y (ft)
#3	$\frac{3}{8}$	24.5 - 25.5
#4	$\frac{1}{2}$	24.5 - 26
#5	$\frac{5}{8}$	21.5 - 22.5
#6	$\frac{3}{4}$	21.5 - 22.5
#7	1	21.5 - 22.5
#8	1.125	17.5 - 18.5
#9	1.125	17.5 - 18.5
#10	1.25	17.5 - 18.5
#11	1.3125	17.5 - 18.5

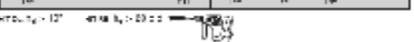
SI Rebar

Rebar Size	d (mm)	l_y (mm)
10 M	10	70 - 80
12 M	12	80 - 90
16 M	16	100 - 110
20 M	20	120 - 130

High Alloys

HTA	HSA	HTS	HTCL	HTTT
d (in)				
#3	#3	#3	#3	#3
#4	#4	#4	#4	#4
#5	#5	#5	#5	#5
#6	#6	#6	#6	#6
#7	#7	#7	#7	#7
#8	#8	#8	#8	#8
#9	#9	#9	#9	#9
#10	#10	#10	#10	#10
#11	#11	#11	#11	#11

HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



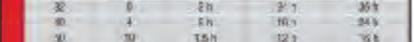
HTA $l_y = 12'$ **HTS** $l_y = 12'$



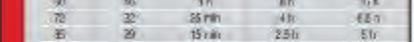
HTA $l_y = 12'$ **HTS** $l_y = 12'$



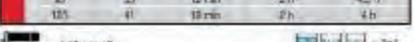
HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$



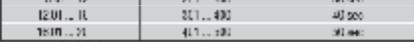
HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$

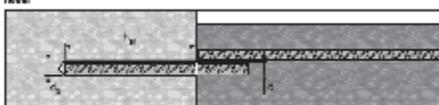


HTA $l_y = 12'$ **HTS** $l_y = 12'$



HTA $l_y = 12'$ **HTS** $l_y = 12'$

Rebar



SI Rebar

Rebar Size	d (mm)	l_y (mm)
#3	10	60 - 80
#4	12	60 - 80
#5	16	70 - 80
#6	16	70 - 80
#7	19	70 - 80
#8	22	80 - 90
#9	22	80 - 90
#10	25	80 - 90
#11	28	80 - 90
#12	32	100 - 110
#13	32	100 - 110
#14	36	110 - 120
#15	36	110 - 120
#16	40	120 - 130

HTA	HSA	HTS	HTCL	HTTT
d (in)				
#3	#3	#3	#3	#3
#4	#4	#4	#4	#4
#5	#5	#5	#5	#5
#6	#6	#6	#6	#6
#7	#7	#7	#7	#7
#8	#8	#8	#8	#8
#9	#9	#9	#9	#9
#10	#10	#10	#10	#10
#11	#11	#11	#11	#11
#12	#12	#12	#12	#12
#13	#13	#13	#13	#13
#14	#14	#14	#14	#14
#15	#15	#15	#15	#15
#16	#16	#16	#16	#16
#17	#17	#17	#17	#17
#18	#18	#18	#18	#18
#19	#19	#19	#19	#19
#20	#20	#20	#20	#20
#21	#21	#21	#21	#21
#22	#22	#22	#22	#22

$l_y = 20$ mm $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



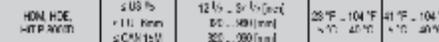
HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



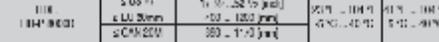
HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



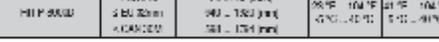
HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



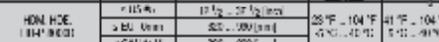
HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



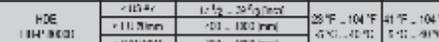
HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm



HTA $l_y = 20$ mm **HTS** $l_y = 20$ mm

FIGURE 9A—MANUFACTURER’S PRINTED INSTALLATION INSTRUCTIONS (MPII) (Continued)

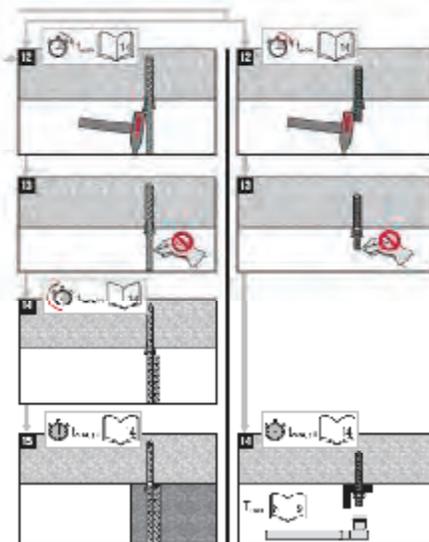
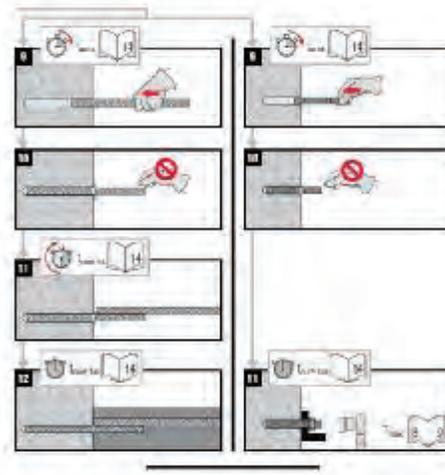
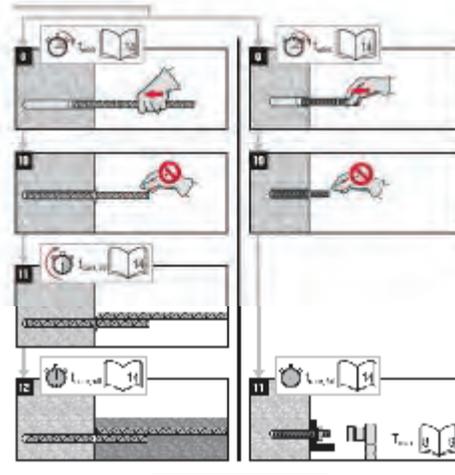
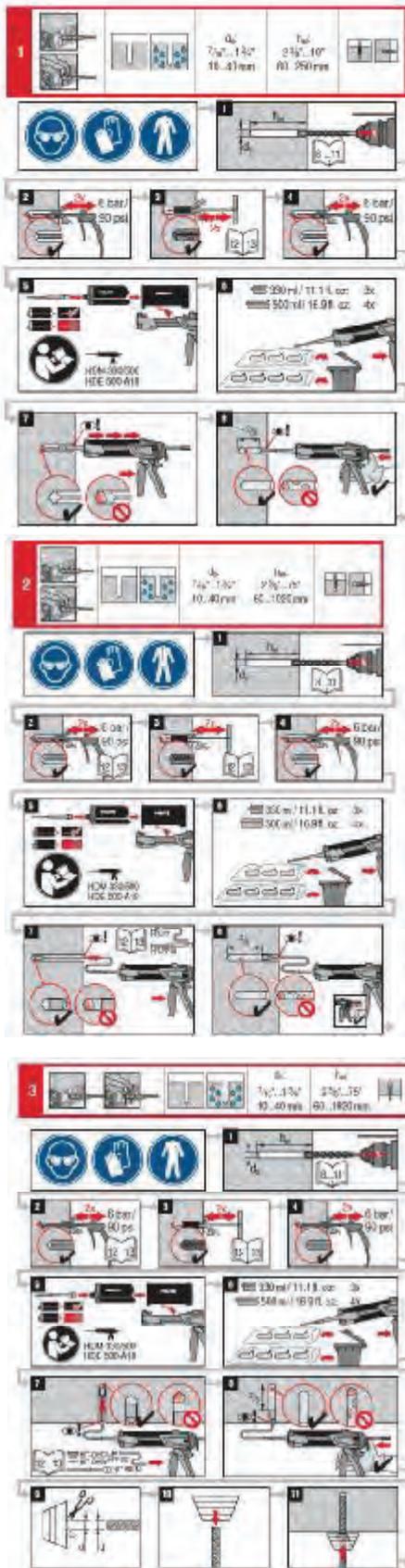


FIGURE 9A—MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) (Continued)

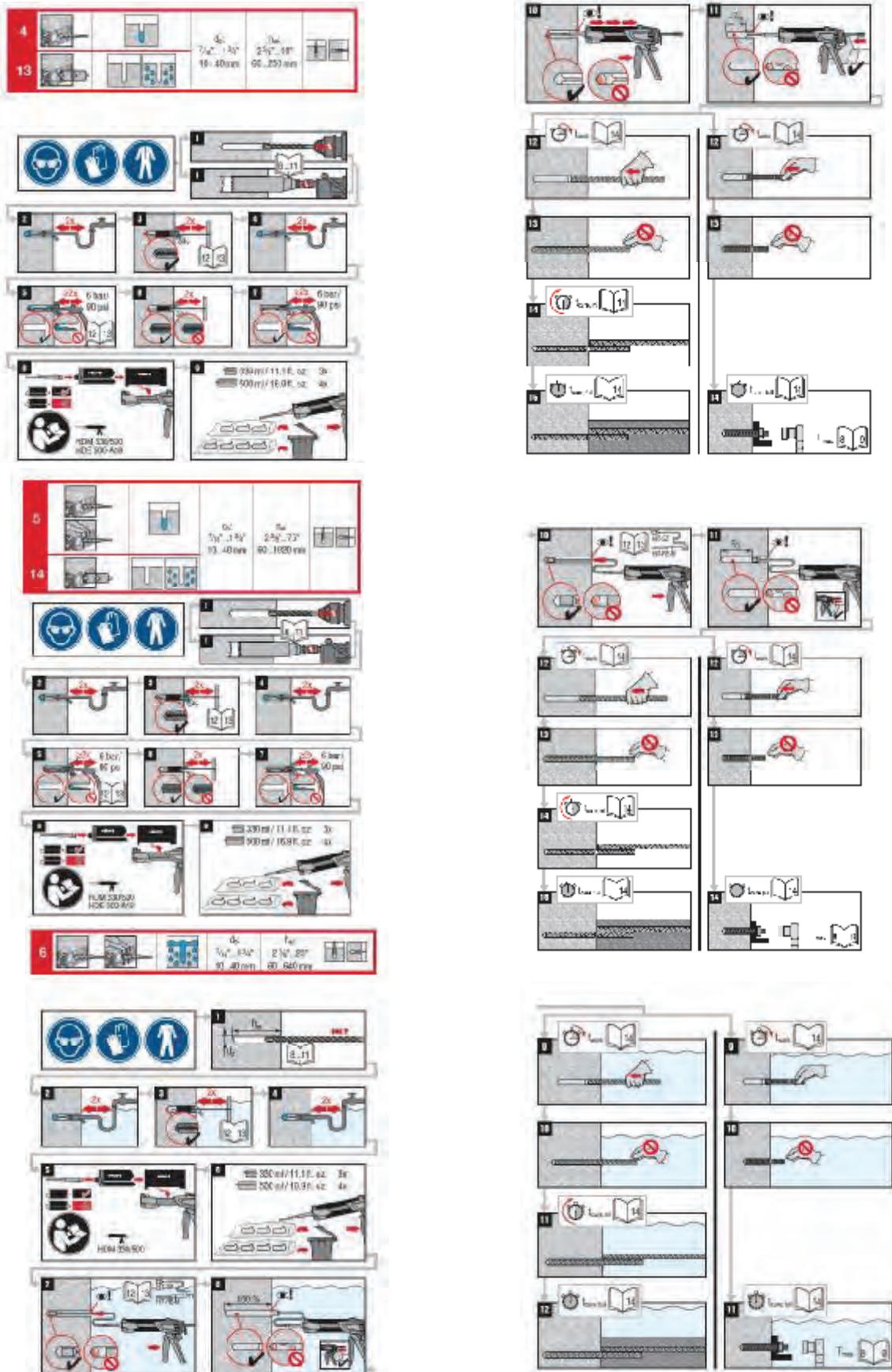


FIGURE 9A—MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) (Continued)

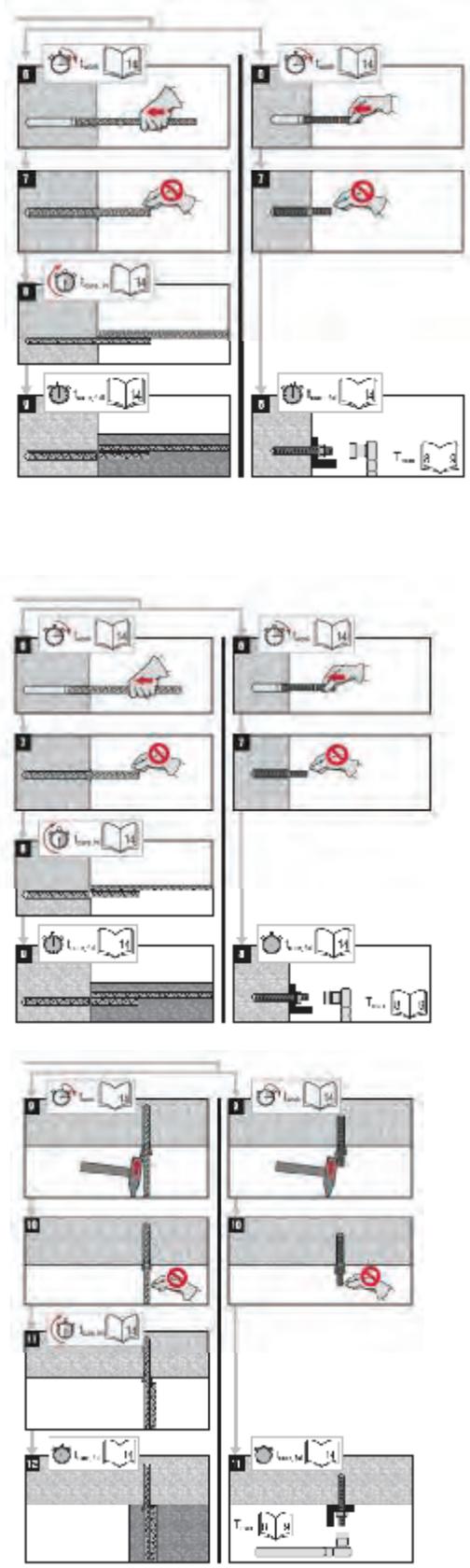
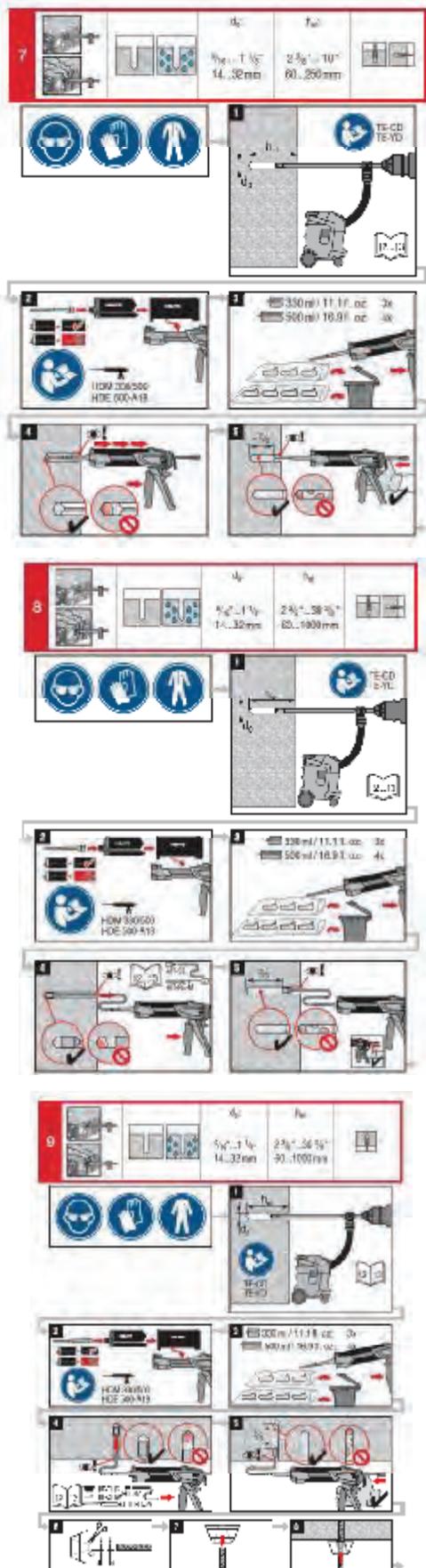


FIGURE 9A—MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) (Continued)

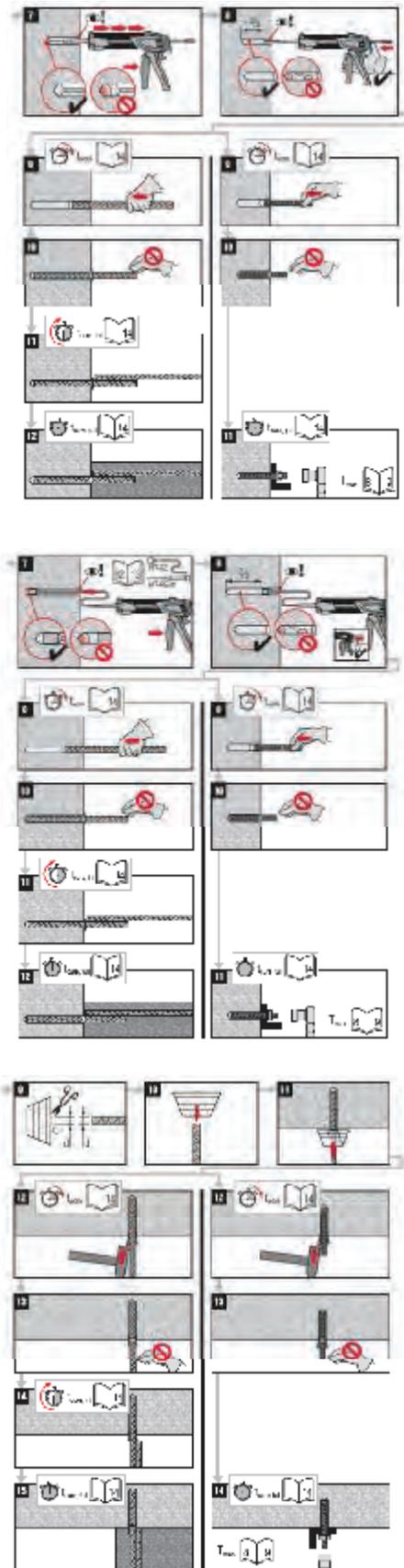
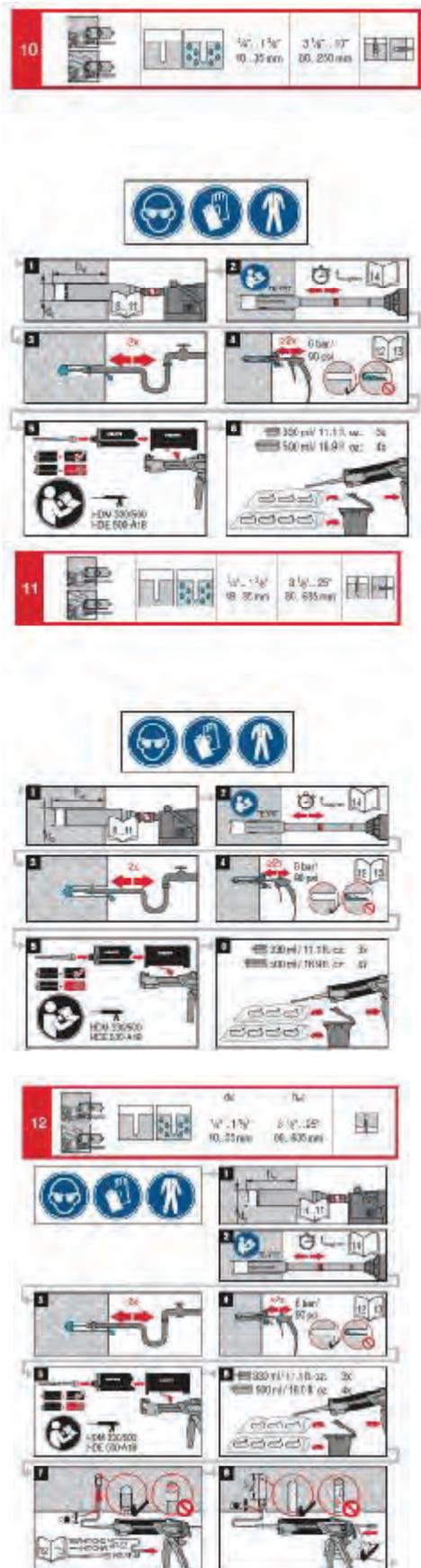


FIGURE 9A—MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) (Continued)



HILTI
TE-YRT

ICC
ES
EVALUATED PRODUCT LISTING



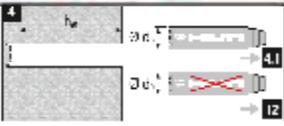
1



2



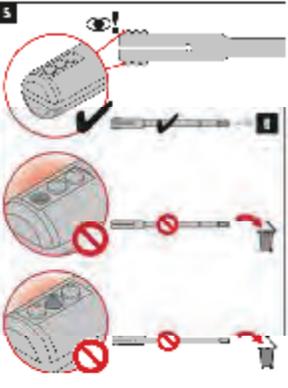
3



4

Ø c ₁ [mm]	TE-YRT
18	TE-YRT 18/20
20	TE-YRT 20/20
22	TE-YRT 22/400
25	TE-YRT 25/400
28	TE-YRT 28/400
30	TE-YRT 30/540
32	TE-YRT 32/500
35	TE-YRT 35/600

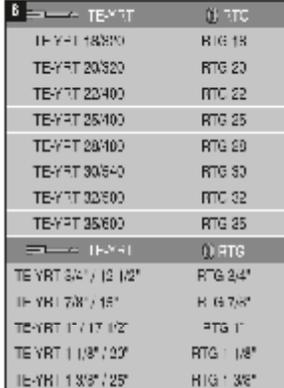
Ø c ₂ [inch]	TE-YRT
3/4"	TE-YRT 3/4" / 12 / 12"
7/8"	TE-YRT 7/8" / 15"
1"	TE-YRT 1" / 17 / 12"
1 1/8"	TE-YRT 1 1/8" / 20"
1 3/8"	TE-YRT 1 3/8" / 25"



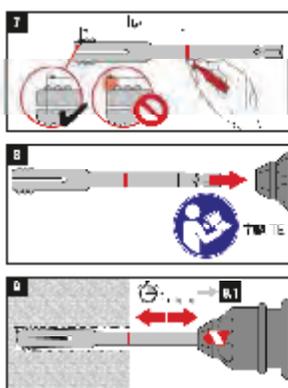
5

TE-YRT	Ø RTC
TE-YRT 18/20	RTC 18
TE-YRT 20/20	RTC 20
TE-YRT 22/400	RTC 22
TE-YRT 25/400	RTC 25
TE-YRT 28/400	RTC 28
TE-YRT 30/540	RTC 30
TE-YRT 32/500	RTC 32
TE-YRT 35/600	RTC 35

TE-YRT	Ø RTG
TE-YRT 3/4" / 12 / 12"	RTG 3/4"
TE-YRT 7/8" / 15"	RTG 7/8"
TE-YRT 1" / 17 / 12"	RTG 1"
TE-YRT 1 1/8" / 20"	RTG 1 1/8"
TE-YRT 1 3/8" / 25"	RTG 1 3/8"



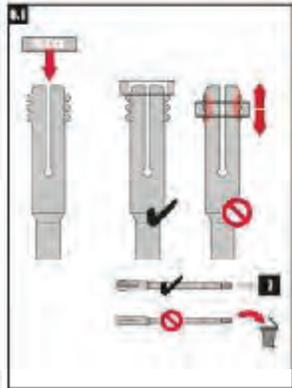
6



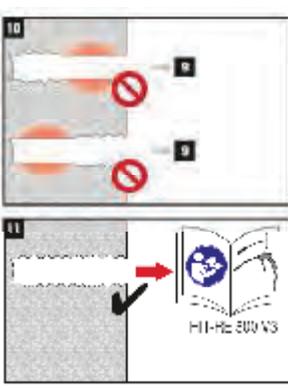
7

t ₁ [mm]	t ₂ [mm] - t ₁ / 10
0 ... 100	10 sec
101 ... 200	20 sec
201 ... 300	30 sec
301 ... 400	40 sec
401 ... 500	50 sec
501 ... 600	50 sec

h ₁ [inch]	t ₂ [sec] - t ₁ / 2.5
0 ... 4	10 sec
4.01 ... 8	20 sec
8.01 ... 12	30 sec
12.01 ... 16	40 sec
16.01 ... 20	50 sec
20.01 ... 25	50 sec



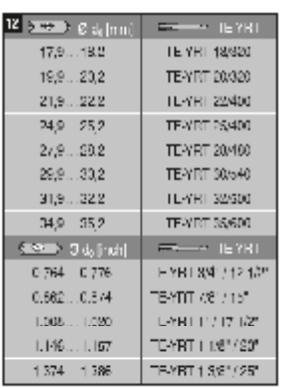
8



9

Ø c ₁ [mm]	TE-YRT
17,9 ... 18,2	TE-YRT 18/20
19,9 ... 20,2	TE-YRT 20/20
21,9 ... 22,2	TE-YRT 22/400
24,9 ... 25,2	TE-YRT 25/400
27,9 ... 29,2	TE-YRT 28/400
29,9 ... 30,2	TE-YRT 30/540
31,9 ... 32,2	TE-YRT 32/500
34,9 ... 35,2	TE-YRT 35/600

Ø c ₂ [inch]	TE-YRT
0.784 ... 0.776	TE-YRT 3/4" / 12 / 12"
0.882 ... 0.874	TE-YRT 7/8" / 15"
1.008 ... 1.000	TE-YRT 1" / 17 / 12"
1.116 ... 1.107	TE-YRT 1 1/8" / 20"
1.374 ... 1.366	TE-YRT 1 3/8" / 25"



10

11

12

FIGURE 9B—MANUFACTURER’S PRINTED INSTALLATION INSTRUCTIONS (MPII)

ICC-ES Evaluation Report

ESR-3814 LABC and LARC Supplement

Reissued January 2019

This report is subject to renewal January 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 A Subsidiary of the International Code Council®

DIVISION: 03 00 00—CONCRETE

Section: 03 16 00—Concrete Anchors

DIVISION: 05 00 00—METALS

Section: 05 05 19—Post-Installed Concrete Anchors

REPORT HOLDER:

HILTI, INC.

EVALUATION SUBJECT:

HILTI HIT-RE 500 V3 ADHESIVE ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Hilti HIT RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System for cracked and uncracked concrete, described in ICC-ES master evaluation report [ESR-3814](#), has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2017 *City of Los Angeles Building Code* (LABC)
- 2017 *City of Los Angeles Residential Code* (LARC)

2.0 CONCLUSIONS

The Hilti HIT-RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System for cracked and uncracked concrete, described in Sections 2.0 through 7.0 of the master evaluation report [ESR-3814](#), complies with LABC Chapter 19, and LARC, and is subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Hilti HIT RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the master evaluation report [ESR-3814](#).
- The design, installation, conditions of use and labeling of the Hilti HIT-RE 500 V3 Adhesive Anchoring System and Post-Installed Reinforcing Bar System are in accordance with the 2015 *International Building Code*® (2015 IBC) provisions noted in the master evaluation report [ESR-3814](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.
- The allowable and strength design values listed in the master evaluation report and tables are for the connection of the adhesive anchors and post installed reinforcing bars to the concrete. The connection between the adhesive anchors or post installed reinforcing bars and the connected members shall be checked for capacity (which may govern).

This supplement expires concurrently with the master report, reissued January 2019.

ICC-ES Evaluation Report

ESR-3814 FBC Supplement

Reissued January 2019

This report is subject to renewal January 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 03 00 00—CONCRETE

Section: 03 16 00—Concrete Anchors

DIVISION: 05 00 00—METALS

Section: 05 05 19—Post-Installed Concrete Anchors

REPORT HOLDER:

HILTI, INC.

EVALUATION SUBJECT:

HILTI HIT-RE 500 V3 ADHESIVE ANCHORS AND POST-INSTALLED REINFORCING BAR CONNECTIONS IN CRACKED AND UNCRACKED CONCRETE

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Hilti HIT-RE 500 V3 Adhesive Anchors and Post-Installed Reinforcing Bar System in Concrete, recognized in ICC-ES master evaluation report ESR-3814, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2014 *Florida Building Code—Building*
- 2014 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Hilti HIT-RE 500 V3 Adhesive Anchor System and Post-Installed Reinforcing Bar System, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3814, comply with the 2014 *Florida Building Code—Building* and the 2014 *Florida Building Code—Residential*, provided the design and installation are in accordance with the *International Building Code*® provisions noted in the master report, and under the following conditions:

- Design wind loads must be based on Section 1609 of the 2014 *Florida Building Code—Building* or Section R301.2.1.1 of the 2014 *Florida Building Code—Residential*, as applicable.
- Load combinations must be in accordance with Section 1605.2 or Section 1605.3 of the 2014 *Florida Building Code—Building*, as applicable.

Use of the Hilti HIT-RE 500 V3 Adhesive Anchor System and Post-Installed Reinforcing Bar System with stainless steel threaded rod materials and reinforcing bars, and stainless steel Hilti HIS-RN inserts has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the 2014 *Florida Building Code—Building* and the 2014 *Florida Building Code—Residential*, when the following condition is met:

The design wind loads for use of the anchors in a High-Velocity Hurricane Zone are based on Section 1620 of the 2014 *Florida Building Code—Building*.

Use of the Hilti HIT-RE 500 V3 Adhesive Anchor System and Post-Installed Reinforcing Bar System with carbon steel threaded rod materials and reinforcing bars and carbon steel Hilti HIS-N inserts for compliance with the High-velocity Hurricane Zone provisions of the 2014 *Florida Building Code—Building* and the 2014 *Florida Building Code—Residential* has not been evaluated and is outside the scope of this supplemental report.

For products falling under Florida Rule 9N-3, verification that the report holder's quality-assurance program is audited by a quality-assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official, when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued January 2019.



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (7:55 PM) Agenda Bill for Consent Agenda,

SUMMARY: Consider approval of the following Consent Agenda items:

- B. Accounts Payable and Payroll
- C. City Council Study Session Minutes, December 3, 2019
- D. Special City Council Meeting Minutes, December 10, 2019
- E. Sustainable Transportation Professional Services Agreement Award and Budget Amendment - Public Works
- F. Memorandum of Understanding with Seattle Police Department Regarding Agency Participation in the Internet Crimes Against Children (ICAC) Multi-Jurisdictional Task Force - Police

AGENDA CATEGORY: Consent Agenda

PROPOSED BY: Executive

RECOMMENDED MOTION: I move to approve the Consent Agenda, as presented.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME:

AGENDA ITEM: Accounts Payable and Payroll

SUMMARY: Approve with Consent Agenda.

AGENDA CATEGORY: Consent Agenda

PROPOSED BY: Finance & Administrative Services

RECOMMENDED MOTION: Approve with Consent Agenda.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Payroll 12-20-2019.pdf](#)

[Payroll 1-6-2020.pdf](#)

[Report to Council of Cash Disbursements 12-26-19.pdf](#)

[Report to Council of Cash Disbursements 01-15-20.pdf](#)

FISCAL DETAILS:

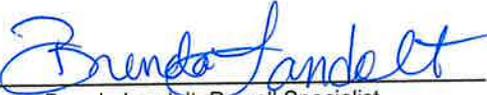
Fund Name(s):

Coding:

PAYROLL

PAYROLL CHECK RUN: 12 - 20 - 2019

Run Type	Run Date	Check # Sequence	Comments	Amount
Normal	12/20/2019	46621 - 46749	Regular check run (Direct Dep)	330,611.03
Normal	12/20/2019	109220 - 109222	Regular check run (Paper Checks)	4,732.87
Vendor	12/20/2019	109223 - 109232	Vendor check run (Paper Checks)	131,712.43
EFTPS	12/20/2019	N/A	Federal Tax Electronic Transfer	119,738.12
Vendor	12/20/2019	N/A	P/R vendor ACH	237.50
			TOTAL:	587,031.95

Prepared and Reviewed by:  Date 12-19-19
 Brenda Landolt, Payroll Specialist

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished, the services rendered or the labor performed as described herein and that the claim is a just, due and unpaid obligation against the City of Bainbridge Island, and that I am authorized to authenticate and certify to said claim.

 Date 12/19/19
 Kimberly M. Dunscombe, Budget Manager

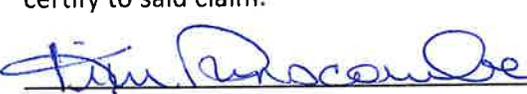
PAYROLL

PAYROLL CHECK RUN: 1 - 6 - 2020

Run Type	Run Date	Check # Sequence	Comments	Amount
Normal	1/6/2020	46750 - 46879	Regular check run (Direct Dep)	307,788.29
Normal	1/6/2020	109233 - 109235	Regular check run (Paper Checks)	4,105.71
Normal	1/6/2020	109236 -109248	Vendor check run (Paper Checks)	328,715.13
EFTPS	1/6/2020	N/A	Federal Tax Electronic Transfer	115,270.79
Vendor	1/6/2020	N/A	P/R vendor ACH	237.50
			TOTAL:	756,117.42

Prepared and Reviewed by:  Date 1-3-20
 Brenda Landolt, Payroll Specialist

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished, the services rendered or the labor performed as described herein and that the claim is a just, due and unpaid obligation against the City of Bainbridge Island, and that I am authorized to authenticate and certify to said claim.

 Date 1/3/20
 Kimberly M. Dunscombe, Budget Manager

ACCOUNTS PAYABLE REPORT TO CITY COUNCIL OF CASH DISBURSEMENTS

CHECK RUN: December 09, 2019 - December 23, 2019
 CITY COUNCIL: December 10, 2019 - December 24, 2019

Last check from previous run: 352318 dated 12/11/19 issued to Zee Medical Service for \$18.16.

Payment Type	Check Date	Check Number	Department/Vendor/Description	Amount
VOID	12/26/19	352398	PW/H.D. Fowler/Address error	N/A
Manual	12/6/19	352319	EX/Bainbridge Chorale/Cultural funding - Q3 2019	1,000.00
Manual	12/6/19	352320	EX/BIMA/Cultural funding 2019	9,000.00
Manual	12/6/19	352321	EX/BI Japanese American Community/Cultural funding Q2-Q3 2019	6,172.54
Manual	12/6/19	352322	EX/Philanthropy NW/Cultural funding - October 2019	7,611.16
Manual	12/9/19	352323	Bainbridge Disposal/Citywide disposal services - November 2019	2,140.57
Manual	12/9/19	352324	CenturyLink/Citywide telemetry & fax services - November 2019	2,869.09
Manual	12/9/19	352325	Puget Sound Energy/City Hall utilities - November 2019	4,374.72
Manual	12/12/19	352326	Bainbridge Disposal/Commons disposal services - November 2019	259.74
Manual	12/12/19	352327	BILA/LTAC funding - Q3 2019	12,477.42
Manual	12/12/19	352328	Arts & Humanities Bainbridge/LTAC funding - Q3 2019	2,750.00
Manual	12/12/19	352329	Richard Burke/SSWM fee refund	570.21
Manual	12/12/19	352330	CenturyLink/Citywide telemetry & fax services - December 2019	1,147.01
Manual	12/12/19	352331	Puget Sound Energy/Citywide utilities - November 2019	24,792.00
Manual	12/12/19	352332	CRT/Rolling Bay Commercial Properties/Rent - December 2019	4,115.00
Manual	12/12/19	352333	Verizon Wireless/Citywide phone services	3,820.74
Manual	12/16/19	352334	EX/Chancery Civic/Professional services - November 2019	984.00
Manual	12/16/19	352335	ENG/Infrastructure Management/Pavement conditions assessment	7,890.00
Manual	12/16/19	352336	PW/Kimball Midwest/Shop supplies	439.89
Manual	12/16/19	352337	POL/Kitsap 911/Call center services September - December 2019	43,880.68
Manual	12/16/19	352338	EX/Philanthropy NW/Cultural funding - November 2019	4,572.86
Manual	12/17/19	352339	US Bank/Credit card purchases - November 2019	20,068.37

Total Manual Checks and Electronic Disbursements	160,936.00
---	-------------------

Regular Run	12/26/19	352340-352474	Total Regular Check Run	387,401.55
Total Disbursements				548,337.55

Retainage Release	N/A	N/A		N/A
Travel Advance	N/A	N/A		N/A

Prepared and Reviewed by  Carrie Freitas, Senior Accounting Technician

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished,
 the services rendered, or the labor performed as described herein and that the claim
 is a just, due, and unpaid obligation against the City of Bainbridge Island,
 and that I am authorized to authenticate and certify to said claim.


 Karl R. Shaw, Accounting Manager

12-20-2019
 Date

VOID
CF 12/18/19

KRS
12-18-19
20

12/18/2019 14:57 |CITY OF BAINBRIDGE ISLAND
cfreitas |A/P CASH DISBURSEMENTS JOURNAL

1
|atcshdsb

CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE

INV DATE PO

CHECK RUN

NET

INVOICE DTL DESC

352398	12/26/2019	VOID	252 H.D. FOWLER COMPANY	236713	I5334079	11/13/2019		-503.86	
			Invoice: I5334079			PW/AIR-VAC VALVES, HOSE BIBB			
				-503.86	73011897 531100	O&M-C/E-PWY FAC-SUPPLIES			
							CHECK	352398 TOTAL:	-503.86
						NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***	-503.86
						COUNT		AMOUNT	
						TOTAL VOIDED CHECKS	1	503.86	
								*** GRAND TOTAL ***	-503.86

Due to different remit addresses being selected, payment failed to include credit. Voided in order to correct remittance and include credit.

12/18/2019 14:57
 cfreitas

|CITY OF BAINBRIDGE ISLAND
 |A/P CASH DISBURSEMENTS JOURNAL

|P 2
 |apcsndsb

JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	LINE DESC				
EFF DATE									
2019 12	211				GENERAL - ACCOUNTS PAYABLE			503.86	
APP 001-213000					AP CASH DISBURSEMENTS JOURNAL				
12/26/2019	352398	VOID			CASH		503.86		
APP 635-111100					AP CASH DISBURSEMENTS JOURNAL				
12/26/2019	352398	VOID							
GENERAL LEDGER TOTAL							503.86	503.86	
APP 631-130000					DUE TO/FROM CLEARING			503.86	
12/26/2019	12/22/19	VOID			GENERAL - DUE TO/FROM CLEARING		503.86		
APP 001-130000									
12/26/2019	12/22/19	VOID							
SYSTEM GENERATED ENTRIES TOTAL							503.86	503.86	
JOURNAL 2019/12/211 TOTAL							1,007.72	1,007.72	

12/18/2019 14:57
cfreitas

CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

P 3
apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	211	12/26/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING	503.86	
001-213000				GENERAL - ACCOUNTS PAYABLE		503.86
				FUND TOTAL	503.86	503.86
631 CLEARING FUND	2019 12	211	12/26/2019			
631-130000				DUE TO/FROM CLEARING		503.86
635-111100				CASH	503.86	
				FUND TOTAL	503.86	503.86

12/18/2019 14:57
cfreitas

|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

|P 4
|apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001 GENERAL FUND			503.86
631 CLEARING FUND		503.86	
	TOTAL	503.86	503.86

** END OF REPORT - Generated by Carrie L. Freitas **

Manual

CF 12/6/19

12/06/2019 12:11 |CITY OF BAINBRIDGE ISLAND
cfreitas |A/P CASH DISBURSEMENTS JOURNAL

|P 1
|apcshdsb

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
352319	12/06/2019	PRTD	8904 BAINBRIDGE CHORALE	236415	S20195	12/02/2019	M120619	1,000.00
Invoice: S20195						Q3 2019 CULTURAL FUNDING - OPERATING S		
				1,000.00	31011732	54110000297	EX-GF-CULTURAL ARTS & SCIENCES	
						CHECK	352319 TOTAL:	1,000.00
352320	12/06/2019	PRTD	7696 BAINBRIDGE ISLAND MU	236417	4264	12/01/2019	M120619	9,000.00
Invoice: 4264						CULTURAL FUNDING - DESTINATION		
				9,000.00	31011732	54110000297	EX-GF-CULTURAL ARTS & SCIENCES	
						CHECK	352320 TOTAL:	9,000.00
352321	12/06/2019	PRTD	8890 BAINBRIDGE ISLAND JA	236416	Q2-Q3 2019	12/01/2019	M120619	6,172.54
Invoice: Q2-Q3 2019						Q2-Q3 2019 CULTURAL FUNDING - OPERATING S		
				6,172.54	31011732	54110000297	EX-GF-CULTURAL ARTS & SCIENCES	
						CHECK	352321 TOTAL:	6,172.54
352322	12/06/2019	PRTD	8544 PHILANTHROPY NORTHWE	236414	3317	10/31/2019	M120619	7,611.16
Invoice: 3317						OCT 2019 CULTURAL FUNDING PRO		
				7,611.16	31017572	54110000297	EX-COMMUNITY FUNDING RESOURCES	
						CHECK	352322 TOTAL:	7,611.16
						NUMBER OF CHECKS	4	*** CASH ACCOUNT TOTAL ***
								23,783.70
						COUNT	AMOUNT	
						TOTAL PRINTED CHECKS	4	23,783.70
								*** GRAND TOTAL ***
								23,783.70

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	ACCOUNT DESC	T	OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	LINE DESC	
2019 12	60					
APP 001-213000					GENERAL - ACCOUNTS PAYABLE	23,783.70
	12/06/2019	M120619	120619		AP CASH DISBURSEMENTS JOURNAL	
APP 635-111100					CASH	23,783.70
	12/06/2019	M120619	120619		AP CASH DISBURSEMENTS JOURNAL	
					GENERAL LEDGER TOTAL	23,783.70
						23,783.70
APP 631-130000					DUE TO/FROM CLEARING	23,783.70
	12/06/2019	M120619	120619		GENERAL - DUE TO/FROM CLEARING	23,783.70
APP 001-130000						
	12/06/2019	M120619	120619			
					SYSTEM GENERATED ENTRIES TOTAL	23,783.70
						23,783.70
					JOURNAL 2019/12/60	TOTAL
						47,567.40
						47,567.40

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	60	12/06/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		23,783.70
001-213000				GENERAL - ACCOUNTS PAYABLE	23,783.70	
				FUND TOTAL	23,783.70	23,783.70
631 CLEARING FUND	2019 12	60	12/06/2019			
631-130000				DUE TO/FROM CLEARING	23,783.70	
635-111100				CASH		23,783.70
				FUND TOTAL	23,783.70	23,783.70

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001 GENERAL FUND			23,783.70
631 CLEARING FUND		23,783.70	
	TOTAL	23,783.70	23,783.70

** END OF REPORT - Generated by Carrie L. Freitas **

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
352323	12/09/2019	PRTD	47 BAINBRIDGE DISPOSAL	236418	0000923115	11/30/2019		M120919	1,721.84
Invoice: 0000923115									
				140.98	91011215 547900				
				25.00	91425358 547900				
				468.02	91011768 547900				
				424.31	91425358 547900				
				644.05	91011897 547900				
				19.48	91111427 547900				
				236419	0000923371	11/30/2019		M120919	76.72
Invoice: 0000923371									
				76.72	91011189 547903				
				236420	0000923313	11/30/2019		M120919	342.01
Invoice: 0000923313									
				342.01	91011189 547900				
CHECK 352323 TOTAL:									2,140.57
352324	12/09/2019	PRTD	551 CENTURYLINK	236421	0399NOV19	11/23/2019		M120919	2,869.09
Invoice: 0399NOV19									
				1,551.04	91425358 542100				
				756.68	91411891 542100				
				72.71	91011755 542100				
				147.07	91011189 542100				
				215.75	91011897 542100				
				70.38	91011255 542100				
				55.46	91011215 542100				
CHECK 352324 TOTAL:									2,869.09
352325	12/09/2019	PRTD	1205 PUGET SOUND ENERGY	236422	CITY HALL NOV19	12/02/2019		M120919	4,374.72
Invoice: CITY HALL NOV19									
				4,374.72	91011189 547100				
CHECK 352325 TOTAL:									4,374.72
NUMBER OF CHECKS 3 *** CASH ACCOUNT TOTAL ***									9,384.38
						COUNT	AMOUNT		
						-----	-----		
TOTAL PRINTED CHECKS						3	9,384.38		
*** GRAND TOTAL ***									9,384.38

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL				ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
EFF DATE								
2019 12	66							
APP 001-213000					GENERAL - ACCOUNTS PAYABLE		6,607.87	
12/09/2019	M120919	120919			AP CASH DISBURSEMENTS JOURNAL			
APP 635-111100					CASH			9,384.38
12/09/2019	M120919	120919			AP CASH DISBURSEMENTS JOURNAL			
APP 402-213000					ACCOUNTS PAYABLE		2,000.35	
12/09/2019	M120919	120919			AP CASH DISBURSEMENTS JOURNAL			
APP 101-213000					STREETS - ACCOUNTS PAYABLE		19.48	
12/09/2019	M120919	120919			AP CASH DISBURSEMENTS JOURNAL			
APP 401-213000					ACCOUNTS PAYABLE		756.68	
12/09/2019	M120919	120919			AP CASH DISBURSEMENTS JOURNAL			
GENERAL LEDGER TOTAL							9,384.38	9,384.38
APP 631-130000					DUE TO/FROM CLEARING		9,384.38	
12/09/2019	M120919	120919						
APP 001-130000					GENERAL - DUE TO/FROM CLEARING			6,607.87
12/09/2019	M120919	120919						
APP 402-130000					DUE TO/FROM CLEARING			2,000.35
12/09/2019	M120919	120919						
APP 101-130000					STREETS - DUE TO/FROM CLEARING			19.48
12/09/2019	M120919	120919						
APP 401-130000					DUE TO/FROM CLEARING			756.68
12/09/2019	M120919	120919						
SYSTEM GENERATED ENTRIES TOTAL							9,384.38	9,384.38
JOURNAL 2019/12/66 TOTAL							18,768.76	18,768.76

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	66	12/09/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		6,607.87
001-213000				GENERAL - ACCOUNTS PAYABLE	6,607.87	
				FUND TOTAL	6,607.87	6,607.87
101 STREET FUND	2019 12	66	12/09/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		19.48
101-213000				STREETS - ACCOUNTS PAYABLE	19.48	
				FUND TOTAL	19.48	19.48
401 WATER OPERATING FUND	2019 12	66	12/09/2019			
401-130000				DUE TO/FROM CLEARING		756.68
401-213000				ACCOUNTS PAYABLE	756.68	
				FUND TOTAL	756.68	756.68
402 SEWER OPERATING FUND	2019 12	66	12/09/2019			
402-130000				DUE TO/FROM CLEARING		2,000.35
402-213000				ACCOUNTS PAYABLE	2,000.35	
				FUND TOTAL	2,000.35	2,000.35
631 CLEARING FUND	2019 12	66	12/09/2019			
631-130000				DUE TO/FROM CLEARING	9,384.38	
635-111100				CASH		9,384.38
				FUND TOTAL	9,384.38	9,384.38

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A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		6,607.87
101	STREET FUND		19.48
401	WATER OPERATING FUND		756.68
402	SEWER OPERATING FUND		2,000.35
631	CLEARING FUND	9,384.38	
	TOTAL	9,384.38	9,384.38

** END OF REPORT - Generated by Carrie L. Freitas **

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
						INVOICE DTL DESC			
				236545	8731DEC19	12/02/2019		M121019	60.12
Invoice:	8731DEC19					COMMONS FIRE ALARM MONIT\			
				60.12	91011755 542100	GG-C/E-COMMONS-PHONE			
				236546	8834DEC19	12/02/2019		M121019	71.98
Invoice:	8834DEC19					259 FERNCLIFF PRV TELEM			
				71.98	91411891 542100	GG-WTR-FAC-PHONE			
				236547	9136DEC19	12/02/2019		M121019	151.54
Invoice:	9136DEC19					CH SECURITY ALARM MONIT			
				151.54	91011189 542100	GG-C/E-CITY HALL-PHONE			
				236548	9791DEC19	12/02/2019		M121019	137.80
Invoice:	9791DEC19					POL TI MANDUS TELCOM			
				137.80	91011215 542100	GG-C/E-PD-PHONE			
				236549	9840DEC19	12/02/2019		M121019	50.35
Invoice:	9840DEC19					HEAD OF BAY WELL TELEM			
				50.35	91411891 542100	GG-WTR-FAC-PHONE			
				236550	9858DEC19	12/02/2019		M121019	50.35
Invoice:	9858DEC19					SANDS AVE WELL TELEM			
				50.35	91411891 542100	GG-WTR-FAC-PHONE			
						CHECK		352330 TOTAL;	1,147.01
352331	12/12/2019	PRTD	1205 PUGET SOUND ENERGY	236465	828NOV19	12/02/2019		M121019	201.25
Invoice:	828NOV19					TAYLOR WELLS LID17 PH1			
				201.25	91415345 547100	GG-ROCKAWAY BCH-UTILITIES			
				236466	IL3NOV19	12/02/2019		M121019	29.34
Invoice:	IL3NOV19					ROUNDAABOUT HS/MAD IMPR			
				29.34	91111263 547100	GG-STRT-STREET LIGHTING-UTIL			
				236467	647NOV19	12/02/2019		M121019	43.87
Invoice:	647NOV19					ST LIGHTS/TRAFFIC CONTR			
				43.87	91111263 547100	GG-STRT-STREET LIGHTING-UTIL			
				236468	IL9NOV19	12/02/2019		M121019	107.15
Invoice:	IL9NOV19					MADISON AVE S			
				107.15	91111263 547100	GG-STRT-STREET LIGHTING-UTIL			
				236469	285NOV19	12/02/2019		M121019	185.41
Invoice:	285NOV19					SPS NORTHTOWN/SPORTSMAN			
				185.41	91421355 547100	GG-SWR-ELECTRIC			
				236470	735NOV19	12/02/2019		M121019	68.57
Invoice:	735NOV19					SHANNON DR/WFP DOCK			
				68.57	91011768 547100	GG-C/E-PARKS-ELECTRIC			
				236471	182NOV19	12/02/2019		M121019	57.15

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
						INVOICE DTL DESC			
Invoice: 182NOV19				57.15	91011255 547100				
						MUNI COURT METER E6			
						GG-C/E-COURT BLDG-ELECTRIC			
				236472	058NOV19	12/02/2019		M121019	41.01
Invoice: 058NOV19				41.01	91011897 547100				
						NE HIDDEN COVE - SHOP			
						GG-C/E-O&M YARD FAC-ELECTRIC			
				236473	973NOV19	12/02/2019		M121019	47.70
Invoice: 973NOV19				47.70	91415345 547100				
						OC RESERVOIR LID17 PH 2			
						GG-ROCKAWAY BCH-UTILITIES			
				236474	558NOV19	12/02/2019		M121019	2,250.58
Invoice: 558NOV19				2,250.58	91011897 547100				
						7315 NE HIDDEN COVE RD			
						GG-C/E-O&M YARD FAC-ELECTRIC			
				236475	336NOV19	12/02/2019		M121019	80.02
Invoice: 336NOV19				80.02	91421355 547100				
						SLS-9 ISLAND TERRACE			
						GG-SWR-ELECTRIC			
				236476	1L11NOV19	12/02/2019		M121019	20.61
Invoice: 1L11NOV19				20.61	91111263 547100				
						ST LTS WW MAD TO 305			
						GG-STRT-STREET LIGHTING-UTIL			
				236477	520-330NOV19	12/02/2019		M121019	73.00
Invoice: 520-330NOV19				73.00	91011768 547100				
						210 WINSLOW WAY E IRRIGATION			
						GG-C/E-PARKS-ELECTRIC			
				236478	823NOV19	12/02/2019		M121019	10.43
Invoice: 823NOV19				10.43	91011768 547100				
						BRIEN DR N/BOOTH EL PANEL			
						GG-C/E-PARKS-ELECTRIC			
				236479	682-B-NOV19	12/02/2019		M121019	28.16
Invoice: 682-B-NOV19				28.16	91111263 547100				
						MUNI PARKING LOT-MAD/MADRON			
						GG-STRT-STREET LIGHTING-UTIL			
				236480	736NOV19	12/02/2019		M121019	66.01
Invoice: 736NOV19				66.01	91011768 547100				
						SHANNON DR/WFP RESTROOM			
						GG-C/E-PARKS-ELECTRIC			
				236481	040-581NOV19	12/02/2019		M121019	133.53
Invoice: 040-581NOV19				133.53	91421355 547100				
						33900 HALLS LHILL RD PUMP			
						GG-SWR-ELECTRIC			
				236482	884NOV19	12/02/2019		M121019	103.28
Invoice: 884NOV19				103.28	91421355 547100				
						SLS FERRY TERMINAL			
						GG-SWR-ELECTRIC			
				236483	111NOV19	12/02/2019		M121019	420.91
Invoice: 111NOV19				420.91	91011215 547100				
						POL STATION METER 2			
						GG-C/E-PD-ELECTRIC			
				236484	717NOV19	12/02/2019		M121019	267.34

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
Invoice: 717NOV19						POL STN METER 1			
				267.34	91011215 547100				
				236485	520-374NOV19	12/02/2019		M121019	62.92
Invoice: 520-374NOV19						SIGNAL @ 108 OLY DR SE			
				62.92	91111264 547100				
				236487	520-136NOV19	12/02/2019		M121019	2,103.36
Invoice: 520-136NOV19						HOB BOOSTER PUMP/WELL			
				2,103.36	91411345 547100				
				236488	IL5NOV19	12/02/2019		M121019	98.22
Invoice: IL5NOV19						COMMODORE OFF HS @ OLY			
				98.22	91111263 547100				
				236489	291NOV19	12/02/2019		M121019	14.08
Invoice: 291NOV19						HEAD OF BAY WELL FIELD			
				14.08	91411345 547100				
				236490	031NOV19	12/02/2019		M121019	144.86
Invoice: 031NOV19						SLS-6 LOVELL LOWER			
				144.86	91421355 547100				
				236492	IL12NOV19	12/02/2019		M121019	72.95
Invoice: IL12NOV19						ST LTS WW 305-FERNCLIFF			
				72.95	91111263 547100				
				236493	573NOV19	12/02/2019		M121019	12.50
Invoice: 573NOV19						COMMODORE/HS RESERVOIR			
				12.50	91411345 547100				
				236494	040-714NOV19	12/02/2019		M121019	10.72
Invoice: 040-714NOV19						7095 NW TWIN PONDS RD			
				10.72	91021182 547100				
				236495	206NOV19	12/02/2019		M121019	377.48
Invoice: 206NOV19						4586 PT WHITE DR NE			
				377.48	91421355 547100				
				236496	256NOV19	12/02/2019		M121019	353.79
Invoice: 256NOV19						SLS-8 HWY305/HARBORVIEW			
				353.79	91421355 547100				
				236497	636NOV19	12/02/2019		M121019	77.96
Invoice: 636NOV19						SLS-7 WING PT WAY			
				77.96	91421355 547100				
				236499	888NOV19	12/02/2019		M121019	205.58
Invoice: 888NOV19						NE HS RD PUMP			
				205.58	91411345 547100				
				236500	658NOV19	12/02/2019		M121019	52.52

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CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
Invoice: 658NOV19				52.52	91421355 547100				
						SLS-4 IRENE/LOWER HAWLEY			
						GG-SWR-ELECTRIC			
				236501	520-298NOV19	12/02/2019		M121019	261.17
Invoice: 520-298NOV19				261.17	91421355 547100				
						SLS-5 WW/SUNDAY COVE			
						GG-SWR-ELECTRIC			
				236502	640NOV19	12/02/2019		M121019	14.85
Invoice: 640NOV19				14.85	91011768 547100				
						BRIEN DR S/BOOTH EL PANEL			
						GG-C/E-PARKS-ELECTRIC			
				236503	982NOV19	12/02/2019		M121019	11.36
Invoice: 982NOV19				11.36	91111264 547100				
						MILLER RD NE BEACON			
						GG-STREET-TRAF CONTROL-UTILITY			
				236504	067NOV19	12/02/2019		M121019	10.43
Invoice: 067NOV19				10.43	91111263 547100				
						MADISON PARKING LOT			
						GG-STRT-STREET LIGHTING-UTIL			
				236505	IL7NOV19	12/02/2019		M121019	73.07
Invoice: IL7NOV19				73.07	91111263 547100				
						MAD PRJ HS TO WINSLOW			
						GG-STRT-STREET LIGHTING-UTIL			
				236506	466NOV19	12/02/2019		M121019	10.43
Invoice: 466NOV19				10.43	91111264 547100				
						MAD/HS RAINBRINGER			
						GG-STREET-TRAF CONTROL-UTILITY			
				236507	093NOV19	12/02/2019		M121019	1,868.09
Invoice: 093NOV19				1,868.09	91411345 547100				
						FLETCHER BAY WELL FIELD			
						GG-WTR-ELECTRIC			
				236508	444NOV19	12/02/2019		M121019	702.09
Invoice: 444NOV19				702.09	91011755 547100				
						BI COMMONS			
						GG-C/E-COMMONS-ELECTRIC			
				236509	461NOV19	12/02/2019		M121019	5,536.98
Invoice: 461NOV19				5,536.98	91425358 547100				
						WWTP			
						GG-WWTP-ELECTRIC			
				236510	WW&305NOV19	12/02/2019		M121019	545.12
Invoice: WW&305NOV19				545.12	91111264 547100				
						WINSLOW WAY & 305			
						GG-STREET-TRAF CONTROL-UTILITY			
				236511	831NOV19	12/02/2019		M121019	3,092.85
Invoice: 831NOV19				3,092.85	91411345 547100				
						SANDS AVE NE WELL FIELD			
						GG-WTR-ELECTRIC			
				236512	797NOV19	12/02/2019		M121019	177.79
Invoice: 797NOV19				177.79	91011255 547100				
						MUNI COURT METER E3			
						GG-C/E-COURT BLDG-ELECTRIC			
				236513	247NOV19	12/02/2019		M121019	50.16

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CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
Invoice: 247NOV19				50.16	91435838 547100				
				236514	143NOV19	12/02/2019		M121019	10.43
Invoice: 143NOV19				10.43	91111264 547100				
				236515	11NOV19	12/02/2019		M121019	215.64
Invoice: 11NOV19				215.64	91111263 547100				
				236516	710NOV19	12/02/2019		M121019	273.51
Invoice: 710NOV19				273.51	91421355 547100				
				236517	893NOV19	12/02/2019		M121019	683.05
Invoice: 893NOV19				683.05	91111263 547100				
				236518	040-751NOV19	12/02/2019		M121019	11.26
Invoice: 040-751NOV19				11.26	91411345 547100				
				236519	SPRINGNOV19	12/02/2019		M121019	50.95
Invoice: SPRINGNOV19				50.95	91111263 547100				
				236520	LYNCTRNOV19	12/02/2019		M121019	84.01
Invoice: LYNCTRNOV19				84.01	91111263 547100				
				236521	BKLYN&MADNOV19	12/02/2019		M121019	13.48
Invoice: BKLYN&MADNOV19				13.48	91111263 547100				
				236522	2360-MADNOV19	12/02/2019		M121019	13.48
Invoice: 2360-MADNOV19				13.48	91111263 547100				
				236523	MAD&ORDNOV19	12/02/2019		M121019	13.48
Invoice: MAD&ORDNOV19				13.48	91111263 547100				
				236524	BKLYN&TOWNNOV19	12/02/2019		M121019	13.48
Invoice: BKLYN&TOWNNOV19				13.48	91111263 547100				
				236525	WING&AZALEANOV19	12/02/2019		M121019	11.10
Invoice: WING&AZALEANOV19				11.10	91111263 547100				
				236526	W.OFMAD-PH1NOV19	12/02/2019		M121019	922.60

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CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
Invoice: W.OFMAD-PH1NOV19			922.60	91111263 547100				
					12/02/2019		M121019	1,813.50
Invoice: E.OFMAD-PH2NOV19			1,813.50	91111263 547100				
					12/02/2019		M121019	42.80
Invoice: MAD&H.S.NOV19			42.80	91111263 547100				
					12/02/2019		M121019	278.04
Invoice: 2665NOV19			278.04	91011768 547100				
					12/02/2019		M121019	10.43
Invoice: 2681NOV19			10.43	91011768 547100				
					12/02/2019		M121019	18.46
Invoice: 2996NOV19			18.46	91411345 547100				
					12/02/2019		M121019	10.43
Invoice: 3010NOV19			10.43	91011768 547100				
					12/02/2019		M121019	11.77
Invoice: 3028NOV19			11.77	91011768 547100				
					12/02/2019		M121019	10.43
Invoice: 3044NOV19			10.43	91011739 547100				
					12/02/2019		M121019	10.83
Invoice: 3051NOV19			10.83	91011768 547100				
					12/02/2019		M121019	97.51
Invoice: 5760NOV19			97.51	91421355 547100				
					12/02/2019		M121019	-5.32
Invoice: MISCNOV19			-5.32	91011189 547100				
							CHECK 352331 TOTAL:	24,792.00

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352332 12/12/2019 PRD 408 ROLLING BAY COMMERC 236551 986323 11/30/2019 M121019 4,115.00
 Invoice: 986323 CRT/DECEMBER RENT
 4,115.00 21011125 545000 COURT - RENTS & LEASES - OPER
 CHECK 352332 TOTAL: 4,115.00

352333 12/12/2019 PRD 1485 VERIZON WIRELESS 236661 9843365459 12/01/2019 M121019 3,820.74
 Invoice: 9843365459 CITYWIDE PHONE SVCS
 3,820.74 91011189 542100 GG-C/E-CITY HALL-PHONE
 CHECK 352333 TOTAL: 3,820.74

NUMBER OF CHECKS 8 *** CASH ACCOUNT TOTAL *** 49,932.12

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	8	49,932.12

*** GRAND TOTAL *** 49,932.12

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T OB	DEBIT	CREDIT
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC					
2019 12	125									
APP 001-213000						GENERAL - ACCOUNTS PAYABLE		13,513.94		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 635-111100						CASH			49,932.12	
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 104-213000						CIVIC IMPR - ACCOUNTS PAYABLE		15,227.42		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 403-213000						ACCOUNTS PAYABLE		620.37		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 402-213000						ACCOUNTS PAYABLE		7,748.01		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 401-213000						ACCOUNTS PAYABLE		7,820.75		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
APP 101-213000						STREETS - ACCOUNTS PAYABLE		5,001.63		
12/12/2019	M121019	121219				AP CASH DISBURSEMENTS JOURNAL				
							GENERAL LEDGER TOTAL		49,932.12	49,932.12
APP 631-130000						DUE TO/FROM CLEARING		49,932.12		
12/12/2019	M121019	121219								
APP 001-130000						GENERAL - DUE TO/FROM CLEARING			13,513.94	
12/12/2019	M121019	121219								
APP 104-130000						CIVIC IMPR DUE TO/FROM CLEAR'G			15,227.42	
12/12/2019	M121019	121219								
APP 403-130000						DUE TO/FROM CLEARING			620.37	
12/12/2019	M121019	121219								
APP 402-130000						DUE TO/FROM CLEARING			7,748.01	
12/12/2019	M121019	121219								
APP 401-130000						DUE TO/FROM CLEARING			7,820.75	
12/12/2019	M121019	121219								
APP 101-130000						STREETS - DUE TO/FROM CLEARING			5,001.63	
12/12/2019	M121019	121219								
							SYSTEM GENERATED ENTRIES TOTAL		49,932.12	49,932.12
							JOURNAL 2019/12/125 TOTAL		99,864.24	99,864.24

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	125	12/12/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		13,513.94
001-213000				GENERAL - ACCOUNTS PAYABLE	13,513.94	
				FUND TOTAL	13,513.94	13,513.94
101 STREET FUND	2019 12	125	12/12/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		5,001.63
101-213000				STREETS - ACCOUNTS PAYABLE	5,001.63	
				FUND TOTAL	5,001.63	5,001.63
104 CIVIC IMPROVEMENT FUND	2019 12	125	12/12/2019			
104-130000				CIVIC IMPR DUE TO/FROM CLEAR'G		15,227.42
104-213000				CIVIC IMPR - ACCOUNTS PAYABLE	15,227.42	
				FUND TOTAL	15,227.42	15,227.42
401 WATER OPERATING FUND	2019 12	125	12/12/2019			
401-130000				DUE TO/FROM CLEARING		7,820.75
401-213000				ACCOUNTS PAYABLE	7,820.75	
				FUND TOTAL	7,820.75	7,820.75
402 SEWER OPERATING FUND	2019 12	125	12/12/2019			
402-130000				DUE TO/FROM CLEARING		7,748.01
402-213000				ACCOUNTS PAYABLE	7,748.01	
				FUND TOTAL	7,748.01	7,748.01
403 STORM & SURFACE WATER FUND	2019 12	125	12/12/2019			
403-130000				DUE TO/FROM CLEARING		620.37
403-213000				ACCOUNTS PAYABLE	620.37	
				FUND TOTAL	620.37	620.37
631 CLEARING FUND	2019 12	125	12/12/2019			
631-130000				DUE TO/FROM CLEARING	49,932.12	
635-111100				CASH		49,932.12
				FUND TOTAL	49,932.12	49,932.12

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		13,513.94
101	STREET FUND		5,001.63
104	CIVIC IMPROVEMENT FUND		15,227.42
401	WATER OPERATING FUND		7,820.75
402	SEWER OPERATING FUND		7,748.01
403	STORM & SURFACE WATER FUND		620.37
631	CLEARING FUND	49,932.12	
	TOTAL	49,932.12	49,932.12

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CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352334 12/16/2019 PRD 9294 VICTORIA BRAZITIS 236785 1008 12/01/2019 M121319 984.00
 Invoice: 1008
 984.00 31011131 541100 EX/PROFESSIONAL SVCS NOV 2019
 EX-GF-PROF SERVICES
 CHECK 352334 TOTAL: 984.00

352335 12/16/2019 PRD 7918 INFRASTRUCTURE MGMT 236678 14018-6 10/15/2019 21800109 M121319 3,165.00
 Invoice: 14018-6
 3,165.00 72111421 54110000993 PAVEMENT CONDITIONS ASSESSMENT
 PVMT CONDITION ASSESS PRF SVC
 236679 14018-7 10/31/2019 21800109 M121319 4,725.00
 Invoice: 14018-7
 4,725.00 72111421 54110000993 PAVEMENT CONDITIONS ASSESSMENT
 PVMT CONDITION ASSESS PRF SVC
 CHECK 352335 TOTAL: 7,890.00

352336 12/16/2019 PRD 8135 MIDWEST MOTOR SUPPLY 236792 7380556 09/03/2019 M121319 45.24
 Invoice: 7380556
 45.24 73638935 531100 PW/HEX NUT (25)
 O&M-STD ALLOCATION-SUPPLIES
 236793 7363609 08/26/2019 M121319 394.65
 Invoice: 7363609
 394.65 73638935 531100 PW/SHOP SUPPLIES
 O&M-STD ALLOCATION-SUPPLIES
 236794 7360359 08/23/2019 M121319 -651.82
 Invoice: 7360359
 -651.82 73638935 531100 PW/RETURN INV7138052
 O&M-STD ALLOCATION-SUPPLIES
 236795 7138052 05/15/2019 M121319 651.82
 Invoice: 7138052
 651.82 73638935 531100 PW/GRIND TOOL, FLEX DISC
 O&M-STD ALLOCATION-SUPPLIES
 CHECK 352336 TOTAL: 439.89

352337 12/16/2019 PRD 8546 KITSAP 911 PUBLIC AU 236786 BIPD 2019-09 08/15/2019 M121319 10,970.17
 Invoice: BIPD 2019-09
 3,291.05 52011286 551000 POL/CALL CENTER SVCS: SEP19
 POLICE - C/E - INVEST CENCOM
 7,679.12 53011286 551000 POLICE - C/E PATROL CENCOM
 236787 BIPD2019-10 09/15/2019 M121319 10,970.17
 Invoice: BIPD2019-10
 3,291.05 52011286 551000 POL/CALL CENTER SVCS: OCT19
 POLICE - C/E - INVEST CENCOM
 7,679.12 53011286 551000 POLICE - C/E PATROL CENCOM
 236788 BIPD2019-11 10/15/2019 M121319 10,970.17
 Invoice: BIPD2019-11
 3,291.05 52011286 551000 POL/CALL CENTER SVCS: NOV19
 POLICE - C/E - INVEST CENCOM
 7,679.12 53011286 551000 POLICE - C/E PATROL CENCOM

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

 Invoice: BIPD2019-12
 236789 BIPD2019-12 11/15/2019 M121319 10,970.17
 POL/CALL CENTER SVCS: DEC19
 3,291.05 52011286 551000 POLICE - C/E - INVEST CENCOM
 7,679.12 53011286 551000 POLICE - C/E PATROL CENCOM
 CHECK 352337 TOTAL: 43,880.68

352338 12/16/2019 PRTD 8544 PHILANTHROPY NORTHWE 236791 TGP 3404 11/30/2019 M121319 4,572.86
 Invoice: TGP 3404 NOV 2019 CULTURAL FUNDING PRO
 4,572.86 31017572 54110000297 EX-COMMUNITY FUNDING RESOURCES
 CHECK 352338 TOTAL: 4,572.86

NUMBER OF CHECKS 5 *** CASH ACCOUNT TOTAL *** 57,767.43

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	5	57,767.43

*** GRAND TOTAL *** 57,767.43

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T OB	DEBIT	CREDIT
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC					
2019 12	166									
APP 001-213000						GENERAL - ACCOUNTS PAYABLE			49,437.54	
12/16/2019	M121319	121619				AP CASH DISBURSEMENTS JOURNAL				
APP 635-111100						CASH				57,767.43
12/16/2019	M121319	121619				AP CASH DISBURSEMENTS JOURNAL				
APP 101-213000						STREETS - ACCOUNTS PAYABLE			7,890.00	
12/16/2019	M121319	121619				AP CASH DISBURSEMENTS JOURNAL				
APP 631-213000						ACCOUNTS PAYABLE			439.89	
12/16/2019	M121319	121619				AP CASH DISBURSEMENTS JOURNAL				
GENERAL LEDGER TOTAL									57,767.43	57,767.43
APP 631-130000						DUE TO/FROM CLEARING			57,327.54	
12/16/2019	M121319	121619								
APP 001-130000						GENERAL - DUE TO/FROM CLEARING				49,437.54
12/16/2019	M121319	121619								
APP 101-130000						STREETS - DUE TO/FROM CLEARING				7,890.00
12/16/2019	M121319	121619								
SYSTEM GENERATED ENTRIES TOTAL									57,327.54	57,327.54
JOURNAL 2019/12/166 TOTAL									115,094.97	115,094.97

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	166	12/16/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		49,437.54
001-213000				GENERAL - ACCOUNTS PAYABLE	49,437.54	
				FUND TOTAL	49,437.54	49,437.54
101 STREET FUND	2019 12	166	12/16/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		7,890.00
101-213000				STREETS - ACCOUNTS PAYABLE	7,890.00	
				FUND TOTAL	7,890.00	7,890.00
631 CLEARING FUND	2019 12	166	12/16/2019			
631-130000				DUE TO/FROM CLEARING	57,327.54	
631-213000				ACCOUNTS PAYABLE	439.89	
635-111100				CASH		57,767.43
				FUND TOTAL	57,767.43	57,767.43

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		49,437.54
101	STREET FUND		7,890.00
631	CLEARING FUND	57,327.54	
	TOTAL	57,327.54	57,327.54

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US Bank - Credit Cards

(CF) 12/17/19

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CASH ACCOUNT: 635 111100 CASH			VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
352339	12/17/2019	PRTD 7314 US BANK	236423	11/22/19-JB	11/25/2019		USB11-19	263.50
Invoice: 11/22/19-JB								
			263.50	54025212 532000			POL/PORT OF BROWNSVILLE/FUEL MARINE - FUEL	
			236424	10/25/19-BB	11/25/2019		USB11-19	118.15
Invoice: 10/25/19-BB								
			118.15	53011212 53110000499			POL/SPARTAN/BODY ARMOR: TOVAR EVP-BULLETPROOF VESTS-PURCHASE	
			236425	10/31/19-BB	11/25/2019		USB11-19	45.00
Invoice: 10/31/19-BB								
			45.00	53011212 549100			POL/ILEETA/MEMBERSHIP: BENKERT PD-C/E-PATROL-DUES/SUBCR/MEMBR	
			236426	11/8/19-BB	11/25/2019		USB11-19	55.00
Invoice: 11/8/19-BB								
			55.00	55011757 541100			POL/WA ST PATROL/BG CHECKS: DUOWM APPLICANTS PD-HARBORMASTER-PROF SVCS	
			236427	11/14/19-BB	11/25/2019		USB11-19	30.23
Invoice: 11/14/19-BB								
			30.23	53011212 531100			POL/AMAZON/TARGET STICKERS PD-C/E-PATROL SUPPLIES	
			236428	11/13/19-BB	11/25/2019		USB11-19	107.91
Invoice: 11/13/19-BB								
			107.91	53011212 531100			POL/AMAZON/TARGETS PD-C/E-PATROL SUPPLIES	
			236430	11/14/19-BB-A	11/25/2019		USB11-19	40.33
Invoice: 11/14/19-BB-A								
			40.33	53011212 531100			POL/AMAZON/T-SHIRTS PD-C/E-PATROL SUPPLIES	
			236431	11/15/19-BB	11/25/2019		USB11-19	42.07
Invoice: 11/15/19-BB								
			42.07	53011212 531100			POL/OPTICS PLANET/ARISELZA DEF VERTICAL GRIP PD-C/E-PATROL SUPPLIES	
			236432	11/19/19-BB	11/25/2019		USB11-19	494.90
Invoice: 11/19/19-BB								
			494.90	53011212 531100			POL/POCKET PRESS/2020 WA CRIM CODE & TRAFF LAWS PD-C/E-PATROL SUPPLIES	
			236433	11/20/19-BB	11/25/2019		USB11-19	217.92
Invoice: 11/20/19-BB								
			217.92	53011212 531100			POL/AMAZON/FLASHLIGHT BATTERIES PD-C/E-PATROL SUPPLIES	
			236434	11/22/19-BB	11/25/2019		USB11-19	89.88
Invoice: 11/22/19-BB								
			89.88	53011212 531100			POL/MAGPUL.COM/MAG941 FOR 1913 PICATINNY PD-C/E-PATROL SUPPLIES	
			236435	11/22/19-BB-A	11/25/2019		USB11-19	71.57
Invoice: 11/22/19-BB-A								
			71.57	53011212 531100			POL/AMAZON/ZOOM LEVEL PD-C/E-PATROL SUPPLIES	
			236436	10/29/19-KD	11/25/2019		USB11-19	2.05
Invoice: 10/29/19-KD								
			2.05	72334953 64245000596			ENG/FACEBOOK/OLY DR AD SR305-OLYMPIC NM-OUTREACH	

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
Invoice: 10/26/19-KE	236437	10/26/19-KE		11/25/2019	USB11-19			61.16
				POL/PAWS&FINS/K9 TOYS, TREATS				
	61.16	53011212	53110000962	TRACKING CANINE-SUPPLIES				
Invoice: 10/30/19-KE	236438	10/30/19-KE		11/25/2019	USB11-19			47.28
				POL/MOBIL/FUEL				
	47.28	53011212	532000	PD-C/E-PATROL-FUEL				
Invoice: 11/3/19-KE	236439	11/3/19-KE		11/25/2019	USB11-19			4.35
				POL/SAFEWAY/K9 TREATS				
	4.35	53011212	53110000962	TRACKING CANINE-SUPPLIES				
Invoice: 11/5/19-KE	236440	11/5/19-KE		11/25/2019	USB11-19			129.55
				POL/PETFLOW.COM/K9 FOOD				
	129.55	53011212	53110000962	TRACKING CANINE-SUPPLIES				
Invoice: 11/10/19-KE	236441	11/10/19-KE		11/25/2019	USB11-19			45.01
				POL/PAWS&FINS/K9 TREATS				
	45.01	53011212	53110000962	TRACKING CANINE-SUPPLIES				
Invoice: 11/24/19-KE	236442	11/24/19-KE		11/25/2019	USB11-19			7.58
				POL/MUD BAY/K9 TREATS				
	7.58	53011212	53110000962	TRACKING CANINE-SUPPLIES				
Invoice: 10/25/19-JH	236443	10/25/19-JH		11/25/2019	USB11-19			15.75
				POL/WSDOT/FERRY				
	15.75	51011211	543100	PD-C/E-ADM-TRAVEL/MEALS/LODGIN				
Invoice: 10/25/19-CK	236444	10/25/19-CK		11/25/2019	USB11-19			45.44
				POL/76/FUEL				
	45.44	53011212	443410	POLICE - C/E PATROL TRAINING				
Invoice: 10/25/19-CK-A	236445	10/25/19-CK-A		11/25/2019	USB11-19			25.93
				POL/JIMMY JOHN'S/LUNCH				
	25.93	53011212	443410	POLICE - C/E PATROL TRAINING				
Invoice: 10/25/19-CK-B	236446	10/25/19-CK-B		11/25/2019	USB11-19			6.00
				POL/WSDOT/BRIDGE TOLL				
	6.00	53011212	443410	POLICE - C/E PATROL TRAINING				
Invoice: 10/26/19-CK	236447	10/26/19-CK		11/25/2019	USB11-19			6.00
				POL/WSDOT/BRIDGE TOLL				
	6.00	53011212	443410	POLICE - C/E PATROL TRAINING				
Invoice: 10/24/19-CK-A	236448	10/24/19-CK-A		11/25/2019	USB11-19			23.65
				POL/PANERA/LUNCH				
	23.65	53011212	443410	POLICE - C/E PATROL TRAINING				
Invoice: 11/8/19-GK	236449	11/8/19-GK		11/25/2019	USB11-19			366.92
				POL/PORT OF BROWNSVILLE/FUEL				
	366.92	54025212	532000	MARINE - FUEL				

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME		INVOICE DTL	DESC		
Invoice: 11/5/19-RL				236450	11/5/19-RL	11/25/2019	USB11-19	210.09
				210.09	11011116 443410	CC/EVENTBRITE/ENERGY CONF: JD COUNCIL - TRAINING		
Invoice: 11/7/19-RL				236451	11/7/19-RL	11/25/2019	USB11-19	299.00
				299.00	11011116 443410	CC/EVENTBRITE/RE-WIRE POLICY CONF: JD COUNCIL - TRAINING		
Invoice: 11/7/19-RL-A				236452	11/7/19-RL-A	11/25/2019	USB11-19	235.00
				235.00	11011116 443410	CC/NW ENVIRO/ENERGY SUMMIT: JD COUNCIL - TRAINING		
Invoice: 11/13/19-RL				236453	11/13/19-RL	11/25/2019	USB11-19	58.41
				58.41	31011131 531100	EX/MARKET PLACE/B-DAY LUNCH EX-GF-SUPPLIES		
Invoice: 11/13/19-RL-A				236454	11/13/19-RL-A	11/25/2019	USB11-19	19.71
				19.71	31011131 531100	EX/NAMETAGCOUNTRY/M. DALTON EX-GF-SUPPLIES		
Invoice: 11/19/19-RL				236456	11/19/19-RL	11/25/2019	USB11-19	129.10
				129.10	31011131 531100	EX/THATS A SOME/DEPT LUNCH: EX EX-GF-SUPPLIES		
Invoice: 11/19/19-RL-A				236457	11/19/19-RL-A	11/25/2019	USB11-19	12.20
				12.20	32011152 549150	EX/WSBA/BAR ASSOC LIC RENEWAL FEE: RS LGL-CERTIFICATIONS/LICENSES		
Invoice: 11/19/19-RL-B				236458	11/19/19-RL-B	11/25/2019	USB11-19	488.00
				488.00	32011152 549150	EX/WSBA/BAR ASSOC LIC RENEWAL: RS LGL-CERTIFICATIONS/LICENSES		
Invoice: 11/18/19-RL				236459	11/18/19-RL	11/25/2019	USB11-19	9.00
				9.00	33011161 531100	EX/BONBON/POL CHIEF CAND. GIFT BAG ITEM HR-C/E-SUPPLIES		
Invoice: 11/20/19-RL				236460	11/20/19-RL	11/25/2019	USB11-19	18.14
				18.14	33011161 531100	EX/T&C/POL CHIEF CAND SNACKS HR-C/E-SUPPLIES		
Invoice: 11/20/19-RL-A				236461	11/20/19-RL-A	11/25/2019	USB11-19	80.91
				80.91	31011131 531100	EX/AMAZON/WHITE BOARD: MD EX-GF-SUPPLIES		
Invoice: 11/20/19-RL-B				236462	11/20/19-RL-B	11/25/2019	USB11-19	74.48
				74.48	33011161 531100	EX/SAFEWAY/POL CHIEF CAND SNACKS HR-C/E-SUPPLIES		
Invoice: 11/21/19-JL				236552	11/21/19-JL	11/25/2019	USB11-19	53.91
				53.91	52011212 532000	POL/CHEVRON/FUEL PD DET-C/E-FUEL		

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
			236554	10/28/19-AL	11/25/2019		USB11-19	74.81
Invoice: 10/28/19-AL								
			74.81	31011256 531100				
			236555	11/4/19-AL	11/25/2019		USB11-19	150.82
Invoice: 11/4/19-AL								
			150.82	31011256 531100				
			236556	11/3/19-AL	11/25/2019		USB11-19	92.37
Invoice: 11/3/19-AL								
			92.37	31011256 531100				
			236557	11/12/19-AL	11/25/2019		USB11-19	237.50
Invoice: 11/12/19-AL								
			237.50	31011256 549100				
			236558	11/12/19-AL-A	11/25/2019		USB11-19	637.00
Invoice: 11/12/19-AL-A								
			637.00	31011256 443410				
			236559	11/14/19-AL	11/25/2019		USB11-19	12.20
Invoice: 11/14/19-AL								
			12.20	31011256 531100				
			236560	11/14/19-AL-A	11/25/2019		USB11-19	589.42
Invoice: 11/14/19-AL-A								
			589.42	31011256 531100				
			236561	11/18/19-AL	11/25/2019		USB11-19	30.00
Invoice: 11/18/19-AL								
			30.00	31011256 443410				
			236562	11/18/19-AL-A	11/25/2019		USB11-19	5.94
Invoice: 11/18/19-AL-A								
			5.94	31011256 443410				
			236563	11/20/19-AL	11/25/2019		USB11-19	33.82
Invoice: 11/20/19-AL								
			33.82	31011256 443410				
			236564	11/20/19-AL-A	11/25/2019		USB11-19	29.02
Invoice: 11/20/19-AL-A								
			29.02	31011256 443410				
			236565	11/20/19-AL-B	11/25/2019		USB11-19	11.91
Invoice: 11/20/19-AL-B								
			11.91	31011256 443410				
			236566	11/21/19-AL	11/25/2019		USB11-19	422.69
Invoice: 11/21/19-AL								
			422.69	31011256 531100				

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME		INVOICE DTL	DESC		
Invoice: 11/21/19-AL-A				236567	11/21/19-AL-A	11/25/2019	USB11-19	9.24
				9.24	31011256 443410	EX/WESTIN/MEAL EX-GF-EMERG PREP-TRAINING		
Invoice: 11/22/19-AL				236568	11/22/19-AL	11/25/2019	USB11-19	5.30
				5.30	31011256 443410	EX/STARBUCKS/MEAL EX-GF-EMERG PREP-TRAINING		
Invoice: 11/25/19-AL				236569	11/25/19-AL	11/25/2019	USB11-19	8.65
				8.65	31011256 443410	EX/WSF/FERRY EX-GF-EMERG PREP-TRAINING		
Invoice: 11/25/19-AL-A				236570	11/25/19-AL-A	11/25/2019	USB11-19	30.00
				30.00	31011256 443410	EX/AMERICAN/BAGGAGE FEE EX-GF-EMERG PREP-TRAINING		
Invoice: 11/25/19-AL-B				236571	11/25/19-AL-B	11/25/2019	USB11-19	7.53
				7.53	31011256 443410	EX/STARBUCKS/MEAL EX-GF-EMERG PREP-TRAINING		
Invoice: 11/25/19-AL-C				236572	11/25/19-AL-C	11/25/2019	USB11-19	14.59
				14.59	31011256 443410	EX/FRESH ATTRACTION/MEAL EX-GF-EMERG PREP-TRAINING		
Invoice: 11/25/19-AL-D				236573	11/25/19-AL-D	11/25/2019	USB11-19	878.55
				878.55	31011256 443410	EX/WESTIN/LODGING EX-GF-EMERG PREP-TRAINING		
Invoice: 10/30/19-CL				236574	10/30/19-CL	11/25/2019	USB11-19	41.93
				41.93	61011581 531100	PCD/AMAZON/DESK SUPPLIES: MS PCD - C/E ADMIN SUPPLIES		
Invoice: 11/1/19-CL				236575	11/1/19-CL	11/25/2019	USB11-19	12.37
				12.37	61011581 531100	PCD/AMAZON/PENS PCD - C/E ADMIN SUPPLIES		
Invoice: 11/4/19-CL				236576	11/4/19-CL	11/25/2019	USB11-19	202.57
				202.57	61011581 531100	PCD/AMAZON/PAPER CUTTER PCD - C/E ADMIN SUPPLIES		
Invoice: 11/4/19-CL-A				236577	11/4/19-CL-A	11/25/2019	USB11-19	57.96
				57.96	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES CUR-DEV-ZONING-ADV		
Invoice: 11/4/19-CL-B				236578	11/4/19-CL-B	11/25/2019	USB11-19	240.10
				240.10	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES CUR-DEV-ZONING-ADV		
Invoice: 11/5/19-CL				236579	11/5/19-CL	11/25/2019	USB11-19	37.35
				37.35	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES CUR-DEV-ZONING-ADV		

CASH ACCOUNT: 635 111100 CASH			VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
			236580	11/14/19-CL	11/25/2019		USB11-19	42.50
Invoice: 11/14/19-CL			42.50	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES			
					CUR-DEV-ZONING-ADV			
			236581	11/18/19-CL	11/25/2019		USB11-19	37.98
Invoice: 11/18/19-CL			37.98	61011581 531100	PCD/SAFEWAY/OPEN HOUSE COOKIES			
					PCD - C/E ADMIN SUPPLIES			
			236582	11/19/19-CL	11/25/2019		USB11-19	108.43
Invoice: 11/19/19-CL			108.43	61011581 531100	PCD/AMAZON/LAMP, WHITEBOARD			
					PCD - C/E ADMIN SUPPLIES			
			236583	11/19/19-CL-A	11/25/2019		USB11-19	10.55
Invoice: 11/19/19-CL-A			10.55	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236584	11/19/19-CL-B	11/25/2019		USB11-19	16.34
Invoice: 11/19/19-CL-B			16.34	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236585	11/19/19-CL-C	11/25/2019		USB11-19	21.56
Invoice: 11/19/19-CL-C			21.56	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236586	11/19/19-CL-D	11/25/2019		USB11-19	25.50
Invoice: 11/19/19-CL-D			25.50	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236587	11/19/19-CL-E	11/25/2019		USB11-19	18.50
Invoice: 11/19/19-CL-E			18.50	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236588	11/19/19-CL-F	11/25/2019		USB11-19	63.44
Invoice: 11/19/19-CL-F			63.44	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236589	11/19/19-CL-G	11/25/2019		USB11-19	36.06
Invoice: 11/19/19-CL-G			36.06	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES			
					CUR-DEV-ZONING-ADV			
			236590	11/20/19-CL	11/25/2019		USB11-19	33.76
Invoice: 11/20/19-CL			33.76	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236591	11/20/19-CL-A	11/25/2019		USB11-19	28.32
Invoice: 11/20/19-CL-A			28.32	61011581 531100	PCD/AMAZON/2020 CALENDAR			
					PCD - C/E ADMIN SUPPLIES			
			236592	11/22/19-CL	11/25/2019		USB11-19	242.03
Invoice: 11/22/19-CL			242.03	63470586 544000	PCD/CLICK2MAIL/LEGAL NOTICES			
					CUR-DEV-ZONING-ADV			

CASH ACCOUNT: 635 111100 CASH			VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
Invoice: 11/4/19-DM			236593	11/4/19-DM	11/25/2019		USB11-19	844.75
							PW/BAGLADY/SANDBAGS	
			844.75	73111256 53110000999	2019		STORM PREP-STRT-SUPPLIES	
Invoice: 11/8/19-DM			236594	11/8/19-DM	11/25/2019		USB11-19	715.17
							PW/NATLBIZFURNITURE/WALL PANELS	
			715.17	73011183 531100			O&M-C/E-CH FAC-SUPPLIES	
Invoice: 11/8/19-DM-A			236595	11/8/19-DM-A	11/25/2019		USB11-19	230.96
							PW/ROSEN/WTR FNTN FILTERS	
			230.96	73011183 531100			O&M-C/E-CH FAC-SUPPLIES	
Invoice: 11/21/19-EM			236596	11/21/19-EM	11/25/2019		USB11-19	39.83
							HR/T&C/POL CHIEF EVENT	
			39.83	33011161 531100			HR-C/E-SUPPLIES	
Invoice: 11/22/19-EM			236597	11/22/19-EM	11/25/2019		USB11-19	501.02
							HR/MARSHALL SUITES/LODGING FOR PC CANDIDATES	
			501.02	33011161 543100			HR-C/E-TRAVEL	
Invoice: 10/25/19-EM			236598	10/25/19-EM	11/25/2019		USB11-19	353.16
							PERSONAL CHARGE - ERROR: CK 10436	
			353.16	33011161 531100			HR-C/E-SUPPLIES	
Invoice: 10/24/19-JR			236599	10/24/19-JR	11/25/2019		USB11-19	82.46
							PCD/SAFEWAY/CUPCAKES	
			82.46	61011581 531100			PCD - C/E ADMIN SUPPLIES	
Invoice: 10/29/19-JR			236600	10/29/19-JR	11/25/2019		USB11-19	733.65
							PCD/BIMA/PCD-DRB MEETING SPACE	
			733.65	61011581 545000			PCD - C/E ADMIN RENTS & LEASES	
Invoice: 10/31/19-JR			236601	10/31/19-JR	11/25/2019		USB11-19	31.59
							PCD/AMAZON/OPEN HOUSE SUPPLIES	
			31.59	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
Invoice: 11/7/19-JR			236602	11/7/19-JR	11/25/2019		USB11-19	159.98
							PCD/AMAZON/OPEN HOUSE SUPPLIES	
			159.98	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
Invoice: 11/8/19-JR			236603	11/8/19-JR	11/25/2019		USB11-19	805.84
							PCD/LAND'SEND/RAIN JACKETS	
			805.84	61011581 531100			PCD - C/E ADMIN SUPPLIES	
Invoice: 11/1/19-JR			236604	11/1/19-JR	11/25/2019		USB11-19	900.00
							PCD/STORAGE98110/ARCHIVE STORAGE	
			900.00	61470581 545000			PCD - DEV ADMIN RENTS & LEASES	
Invoice: 11/10/19-JR			236605	11/10/19-JR	11/25/2019		USB11-19	40.69
							PCD/JOANN/SIGN HOLDERS	
			40.69	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	

CASH ACCOUNT: 635			111100	CASH					
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET

INVOICE DTL DESC									
				236606	11/10/19-JR-A	11/25/2019		USB11-19	27.87
Invoice: 11/10/19-JR-A								PCD/COSTCO/OPEN HOUSE SUPPLIES	
				27.87	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
				236607	11/10/19-JR-B	11/25/2019		USB11-19	10.51
Invoice: 11/10/19-JR-B								PCD/LOWE'S/OPEN HOUSE SUPPLIES	
				10.51	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
				236608	11/10/19-JR-C	11/25/2019		USB11-19	16.08
Invoice: 11/10/19-JR-C								PCD/WALMART/OPEN HOUSE SUPPLIES	
				16.08	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
				236609	11/7/19-JR-A	11/25/2019		USB11-19	13.07
Invoice: 11/7/19-JR-A								PCD/ACE/ARCHIVE BROOM	
				13.07	61011581 531100			PCD - C/E ADMIN SUPPLIES	
				236610	11/13/19-JR	11/25/2019		USB11-19	53.45
Invoice: 11/13/19-JR								PCD/SAFEWAY/OPEN HOUSE SNACKS	
				53.45	61011581 542450			PCD - ADM COMMUNIC COMNTY INFO	
				236611	11/19/19-JR	11/25/2019		USB11-19	80.83
Invoice: 11/19/19-JR								PCD/LAND'S END/RAIN JACKET	
				80.83	61011581 531100			PCD - C/E ADMIN SUPPLIES	
				236612	10/29/19-DR	11/25/2019		USB11-19	95.87
Invoice: 10/29/19-DR								IT/AMAZON/DVD DRIVES, USB HUBS	
				95.87	81011881 535500			IT - C/E COMPUTER PARTS & EQ	
				236613	11/8/19-DR	11/25/2019		USB11-19	32.68
Invoice: 11/8/19-DR								IT/AMAZON/HEADSET, USB HUB	
				32.68	81011881 535500			IT - C/E COMPUTER PARTS & EQ	
				236614	10/31/19-WS	11/25/2019		USB11-19	12.26
Invoice: 10/31/19-WS								POL/AMAZON/RADIO EARPIECE	
				12.26	53011212 531100			PD-C/E-PATROL SUPPLIES	
				236615	11/10/19-BS	11/25/2019		USB11-19	225.37
Invoice: 11/10/19-BS								POL/AMAZON/M8 ENGINE & TRAILER PARTS	
				225.37	54025212 531100			MARINE - SUPPLIES	
				236616	11/21/19-BS	11/25/2019		USB11-19	35.84
Invoice: 11/21/19-BS								POL/KING TRAILERS/M8 TRAILER PARTS	
				35.84	54025212 531100			MARINE - SUPPLIES	
				236617	10/29/19-CW	11/25/2019		USB11-19	23.98
Invoice: 10/29/19-CW								ENG/SAFEWAY/PASTRIES	
				23.98	71011321 531100			PW - C/E SUPPLIES	
				236618	10/29/19-CW-A	11/25/2019		USB11-19	58.70
Invoice: 10/29/19-CW-A								ENG/SAFEWAY/COFFEE	
				58.70	71011321 531100			PW - C/E SUPPLIES	

CASH ACCOUNT: 635 111100 CASH			VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
Invoice: 10/31/19-TD			236619	10/31/19-TD	11/25/2019		USB11-19	39.73
			39.73	21011125 531100	CRT/CRYSTAL SPRINGS/WATER SVC			
					COURT - SUPPLIES			
Invoice: 11/18/19-TD			236620	11/18/19-TD	11/25/2019		USB11-19	488.00
			488.00	21011125 549100	CRT/WSBA/BAR ASSOC DUES: SM			
					COURT-DUES/SUBSCR/MEMBERSHIPS			
Invoice: 11/18/19-TD-A			236621	11/18/19-TD-A	11/25/2019		USB11-19	12.20
			12.20	21011125 549100	CRT/WSBA/CC FEE			
					COURT-DUES/SUBSCR/MEMBERSHIPS			
Invoice: 10/28/19-KB			236622	10/28/19-KB	11/25/2019		USB11-19	15.75
			15.75	33011164 443410	HR/WSF/FERRY			
					HR-C/E-TRAINING EXP			
Invoice: 10/28/19-KB-A			236623	10/28/19-KB-A	11/25/2019		USB11-19	15.75
			15.75	33011164 443410	HR/WSF/FERRY			
					HR-C/E-TRAINING EXP			
Invoice: 10/28/19-KB-B			236624	10/28/19-KB-B	11/25/2019		USB11-19	50.00
			50.00	33011164 443410	HR/SUMMIT LAW/PFML WEBINAR			
					HR-C/E-TRAINING EXP			
Invoice: 11/6/19-KB			236625	11/6/19-KB	11/25/2019		USB11-19	-15.00
			-15.00	33011164 443410	HR/AWC/PARTIAL REFUND			
					HR-C/E-TRAINING EXP			
Invoice: 11/19/19-KB			236626	11/19/19-KB	11/25/2019		USB11-19	169.48
			169.48	33011161 543100	HR/EXPEDIA/HOTEL: PC CANDIDATE: DW			
					HR-C/E-TRAVEL			
Invoice: 11/20/19-SM			236627	11/20/19-SM	11/25/2019		USB11-19	54.46
			54.46	91011215 542100	POL/AMAZON/CELL CASES			
					GG-C/E-PD-PHONE			
Invoice: 11/18/19-KJ			236628	11/18/19-KJ	11/25/2019		USB11-19	-150.00
			-150.00	11011116 542450	CC/BIMPRD/DAMAGE DEP			
					COMMUNITY OUTREACH/PARTICIPA			
Invoice: 10/25/19-KS			236629	10/25/19-KS	11/25/2019		USB11-19	1,000.00
			1,000.00	011 111760	FIN/KITSAP TRANSIT/5 ORCA CARDS			
					ORCA CARDS			
Invoice: 11/5/19-KS			236630	11/5/19-KS	11/25/2019		USB11-19	395.42
			395.42	41011141 531100	FIN/TYLER BUS FORMS/YE FORMS			
					FIN - C/E ADMIN SUPPLIES			
Invoice: 11/14/19-KS			236631	11/14/19-KS	11/25/2019		USB11-19	29.54
			29.54	41011141 531100	FIN/T&C/MEETING SNACKS			
					FIN - C/E ADMIN SUPPLIES			

CASH ACCOUNT: 635 111100 CASH			VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME			INVOICE DTL	DESC		
Invoice: 10/28/19-KG			236632	10/28/19-KG	11/25/2019		USB11-19	3.93
			3.93	71011321 531100	PW/AMAZON/PEN REFILLS	PW - C/E SUPPLIES		
Invoice: 10/28/19-KG-A			236633	10/28/19-KG-A	11/25/2019		USB11-19	6.86
			6.86	71011321 531100	PW/AMAZON/PHN CASE	PW - C/E SUPPLIES		
Invoice: 10/28/19-KG-B			236634	10/28/19-KG-B	11/25/2019		USB11-19	78.47
			78.47	72431831 531100	ENG/AMAZON/SAND BAGS	ENG - SSWM ADM SUPPLIES		
Invoice: 10/30/19-KG			236635	10/30/19-KG	11/25/2019		USB11-19	-56.63
			-56.63	71111431 531100	PW/AMAZON/CREDIT ON RETURN	PW - ACCESS MGMT SUPPLIES		
Invoice: 10/30/19-KG-A			236636	10/30/19-KG-A	11/25/2019		USB11-19	37.74
			37.74	71011321 443410	PW/BROWN PAPER/PLAN REVIEW TRNG	PW - C/E TRAINING		
Invoice: 10/30/19-KG-B			236637	10/30/19-KG-B	11/25/2019		USB11-19	6.68
			6.68	71011321 531100	PW/AMAZON/PEN REFILLS	PW - C/E SUPPLIES		
Invoice: 10/31/19-KG			236638	10/31/19-KG	11/25/2019		USB11-19	14.15
			14.15	71111431 531100	PW/NEW EGG/DESK PAD	PW - ACCESS MGMT SUPPLIES		
Invoice: 10/31/19-KG-A			236639	10/31/19-KG-A	11/25/2019		USB11-19	20.14
			20.14	71011321 531100	PW/AMAZON/PEN REFILLS	PW - C/E SUPPLIES		
Invoice: 11/14/19-KG			236640	11/14/19-KG	11/25/2019		USB11-19	425.00
			425.00	72011321 549100	ENG/MRSC/ROSTER RENEWAL	ENG - C/E ADMIN MISCELLEANEOUS		
Invoice: 11/14/19-KG-A			236641	11/14/19-KG-A	11/25/2019		USB11-19	190.00
			190.00	72011321 549100	ENG/NIGP/AGENCY DUES	ENG - C/E ADMIN MISCELLEANEOUS		
Invoice: 11/18/19-KG			236642	11/18/19-KG	11/25/2019		USB11-19	37.74
			37.74	71011321 443410	PW/BROWN PAPER/PLAN REVIEW TRNG	PW - C/E TRAINING		
Invoice: 11/18/19-KG-A			236643	11/18/19-KG-A	11/25/2019		USB11-19	.02
			.02	71111431 443410	PW/VENETIAN/ROOM CHARGE ADJ	PW - ACCESS TRAINING		
Invoice: 11/18/19-KG-B			236644	11/18/19-KG-B	11/25/2019		USB11-19	.02
			.02	71111431 443410	PW/VENETIAN/ROOM CHARGE ADJ	PW - ACCESS TRAINING		

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NUMBER OF CHECKS 1 *** CASH ACCOUNT TOTAL *** 20,068.37

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	1	20,068.37

*** GRAND TOTAL *** 20,068.37

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T OB	DEBIT	CREDIT	
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC						
2019 12	191	APP 001-213000					GENERAL - ACCOUNTS PAYABLE		16,884.93		
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 635-111100						CASH				20,068.37	
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 301-213000						ACCOUNTS PAYABLE		2.05			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 407-213000						ACCOUNTS PAYABLE		1,556.00			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 101-213000						STREETS - ACCOUNTS PAYABLE		902.33			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 403-213000						ACCOUNTS PAYABLE		78.47			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 631-213000						ACCOUNTS PAYABLE		628.25			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
APP 401-213000						ACCOUNTS PAYABLE		16.34			
12/17/2019	USB11-19	USBNK				AP CASH DISBURSEMENTS JOURNAL					
							GENERAL LEDGER TOTAL		20,068.37	20,068.37	
							DUE TO/FROM CLEARING		19,440.12		
APP 631-130000											
12/17/2019	USB11-19	USBNK				GENERAL - DUE TO/FROM CLEARING				16,884.93	
APP 001-130000											
12/17/2019	USB11-19	USBNK				DUE TO/FROM CLEARING				2.05	
APP 301-130000											
12/17/2019	USB11-19	USBNK				DUE TO/FROM CLEARING				1,556.00	
APP 407-130000											
12/17/2019	USB11-19	USBNK				STREETS - DUE TO/FROM CLEARING				902.33	
APP 101-130000											
12/17/2019	USB11-19	USBNK				DUE TO/FROM CLEARING				78.47	
APP 403-130000											
12/17/2019	USB11-19	USBNK				DUE TO/FROM CLEARING				16.34	
APP 401-130000											
12/17/2019	USB11-19	USBNK				DUE TO/FROM CLEARING					
							SYSTEM GENERATED ENTRIES TOTAL		19,440.12	19,440.12	
							JOURNAL 2019/12/191 TOTAL		39,508.49	39,508.49	

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	191	12/17/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		16,884.93
001-213000				GENERAL - ACCOUNTS PAYABLE	16,884.93	
				FUND TOTAL	16,884.93	16,884.93
101 STREET FUND	2019 12	191	12/17/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		902.33
101-213000				STREETS - ACCOUNTS PAYABLE	902.33	
				FUND TOTAL	902.33	902.33
301 CAPITAL CONSTRUCTION FUND	2019 12	191	12/17/2019			
301-130000				DUE TO/FROM CLEARING		2.05
301-213000				ACCOUNTS PAYABLE	2.05	
				FUND TOTAL	2.05	2.05
401 WATER OPERATING FUND	2019 12	191	12/17/2019			
401-130000				DUE TO/FROM CLEARING		16.34
401-213000				ACCOUNTS PAYABLE	16.34	
				FUND TOTAL	16.34	16.34
403 STORM & SURFACE WATER FUND	2019 12	191	12/17/2019			
403-130000				DUE TO/FROM CLEARING		78.47
403-213000				ACCOUNTS PAYABLE	78.47	
				FUND TOTAL	78.47	78.47
407 BUILDING & DEVELOPMENT FUND	2019 12	191	12/17/2019			
407-130000				DUE TO/FROM CLEARING		1,556.00
407-213000				ACCOUNTS PAYABLE	1,556.00	
				FUND TOTAL	1,556.00	1,556.00
631 CLEARING FUND	2019 12	191	12/17/2019			
631-130000				DUE TO/FROM CLEARING	19,440.12	
631-213000				ACCOUNTS PAYABLE	628.25	
635-111100				CASH		20,068.37
				FUND TOTAL	20,068.37	20,068.37

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JOURNAL ENTRIES TO BE CREATED

FUND	DUE TO	DUE FROM
001 GENERAL FUND		16,884.93
101 STREET FUND		902.33
301 CAPITAL CONSTRUCTION FUND		2.05
401 WATER OPERATING FUND		16.34
403 STORM & SURFACE WATER FUND		78.47
407 BUILDING & DEVELOPMENT FUND		1,556.00
631 CLEARING FUND	19,440.12	
	-----	-----
TOTAL	19,440.12	19,440.12

** END OF REPORT - Generated by Carrie L. Freitas **

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CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
352340	12/26/2019	PRTD 5 ACE HARDWARE	236662	45299/1	11/22/2019		12/22/19	29.40
		Invoice: 45299/1						
			29.40	73411345 531100			PW/GLOVES, WRENCH STRAP, PACKING SHEETS OFFICE SUPPLIES	
			236802	45500/1	12/13/2019		12/22/19	109.51
		Invoice: 45500/1						
			109.51	73111264 531100			PW/WASHER, LAGS, HOLE DIGGER O&M-STREET-TRAF CONTROL-SUPPLY	
			236803	45468/1	12/11/2019		12/22/19	130.71
		Invoice: 45468/1						
			130.71	73011255 531100			PW/BATTERIES O&M-C/E-COURT FAC-SUPPLIES	
			236804	45465/1	12/11/2019		12/22/19	6.53
		Invoice: 45465/1						
			6.53	73111264 531100			PW/PLUG DRAIN SNAP LOCK O&M-STREET-TRAF CONTROL-SUPPLY	
			236805	45450/1	12/10/2019		12/22/19	10.89
		Invoice: 45450/1						
			10.89	73011183 531100			PW/SCREWS O&M-C/E-CH FAC-SUPPLIES	
			236806	454471/1	12/10/2019		12/22/19	105.68
		Invoice: 454471/1						
			105.68	73111290 531100			PW/SR CTR XMAS LIGHTS O&M-STREET-MAINT O/H-SUPPLIES	
			236807	45452/1	12/10/2019		12/22/19	29.42
		Invoice: 45452/1						
			29.42	73111290 531100			PW/SR CTR XMAS LIGHTS O&M-STREET-MAINT O/H-SUPPLIES	
			236808	45419/1	12/06/2019		12/22/19	77.83
		Invoice: 45419/1						
			77.83	73431835 531100			PW/CULVERT MAINT SUPPLIES OFFICE SUPPLIES	
			236913	45496/1	12/13/2019		12/22/19	57.67
		Invoice: 45496/1						
			57.67	73421355 531100			PW/WET WELL CLEANING DEVICE SUPPLIES WIN COLL-SUPPLIES	
			236914	45491/1	12/12/2019		12/22/19	31.60
		Invoice: 45491/1						
			31.60	73411345 531100			PW/AUGER OFFICE SUPPLIES	
			236915	45441/1	12/09/2019		12/22/19	54.48
		Invoice: 45441/1						
			54.48	73411345 531100			PW/BATTERIES OFFICE SUPPLIES	
			236916	45433/1	12/09/2019		12/22/19	44.40
		Invoice: 45433/1						
			44.40	73411345 531100			PW/WELL SITE MAINT SUPPLIES OFFICE SUPPLIES	
			236917	45444/1	12/09/2019		12/22/19	10.33
		Invoice: 45444/1						
			10.33	73411345 531100			PW/FUSES OFFICE SUPPLIES	

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
			236918	45438/1	12/09/2019		12/22/19	23.97
Invoice: 45438/1					PW/SOLDERING IRON			
			23.97	73638935 531100	O&M-STD ALLOCATION-SUPPLIES			
					CHECK	352340	TOTAL:	722.42
352341	12/26/2019	PRTD 863 INTERSTATE BATTERIES	236716	22060160	11/21/2019		12/22/19	132.93
Invoice: 22060160					PW/BATTERY			
			132.93	73421355 531100	WIN COLL-SUPPLIES			
					CHECK	352341	TOTAL:	132.93
352342	12/26/2019	PRTD 7994 PENINSULA SERVICES	236809	92262	11/30/2019		12/22/19	32.00
Invoice: 92262					CRT/MOBILE SHREDDING SVC			
			32.00	21011125 541100	COURT - PROFESSIONAL SERVICES			
Invoice: 92263								
			236810	92263	11/30/2019		12/22/19	64.00
					POL/MOBILE SHREDDING			
			64.00	51011211 541100	PD-C/E-ADM-PROF SVCS			
					CHECK	352342	TOTAL:	96.00
352343	12/26/2019	PRTD 8991 ALLIANCE 2020, INC	236698	573500	11/30/2019		12/22/19	66.20
Invoice: 573500					HR/BACKGROUND CHECKS			
			66.20	33011161 541100	HR-C/E-PROF SVCS			
					CHECK	352343	TOTAL:	66.20
352344	12/26/2019	PRTD 8014 ALSTON, COURTNAGE &	236811	120981	11/30/2019		12/22/19	120.00
Invoice: 120981					ENG/PROF SVCS: HARRISON PROPERTY			
			120.00	72311942 64110000724	PD/COURT BLDG-PROF SVCS/DESIGN			
					CHECK	352344	TOTAL:	120.00
352345	12/26/2019	PRTD 7166 AMERICAN MESSAGING	236663	W4104492TL	12/01/2019		12/22/19	94.03
Invoice: W4104492TL					PW/MESSAGING SVC			
			94.03	73637891 542100	O&M - ALLOC FACIL TELEPHONE			
					CHECK	352345	TOTAL:	94.03
352346	12/26/2019	PRTD 29 PNWS-AWWA	236665	3709	12/02/2019		12/22/19	250.00
Invoice: 3709					PW/WWUC DUES 2020: CK			
			250.00	73411345 549100	DUES/SUBSCRIPTIONS			

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
CHECK NO	CHK DATE	TYPE	VENDOR NAME						
INVOICE DTL DESC									
								CHECK 352346 TOTAL:	250.00
352347	12/26/2019	PRTD	4710 ASSOCIATED PETROLEU	236666	0138969-IN	11/21/2019	12/22/19	843.33	
Invoice: 0138969-IN				843.33	73638932 532000	PW/350 GAL UNLEADED	O&M-FUEL ALLOC TO OTH DEPTS		
				236667	0138968-IN	11/21/2019	12/22/19	233.10	
Invoice: 0138968-IN				233.10	73638893 532000	PW/60 GAL DIESEL	O&M-FUEL USE-ALLOCATION		
				236668	0138098-IN	11/19/2019	12/22/19	653.87	
Invoice: 0138098-IN				653.87	73638893 532000	PW/220 GAL DIESEL	O&M-FUEL USE-ALLOCATION		
				236669	0138099-IN	11/19/2019	12/22/19	595.47	
Invoice: 0138099-IN				595.47	73638932 532000	PW/247 GAL UNLEADED	O&M-FUEL ALLOC TO OTH DEPTS		
				236670	0136262-IN	11/14/2019	12/22/19	297.60	
Invoice: 0136262-IN				297.60	73638893 532000	PW/75 GAL DIESEL	O&M-FUEL USE-ALLOCATION		
				236671	0136263-IN	11/14/2019	12/22/19	540.13	
Invoice: 0136263-IN				540.13	73638932 532000	PW/219 GAL UNLEADED	O&M-FUEL ALLOC TO OTH DEPTS		
				236672	0135325-IN	11/12/2019	12/22/19	226.02	
Invoice: 0135325-IN				226.02	73638893 532000	PW/48 GAL DIESEL	O&M-FUEL USE-ALLOCATION		
				236673	0135326-IN	11/12/2019	12/22/19	585.78	
Invoice: 0135326-IN				585.78	73638932 532000	PW/233 GAL UNLEADED	O&M-FUEL ALLOC TO OTH DEPTS		
								CHECK 352347 TOTAL:	3,975.30
352348	12/26/2019	PRTD	5161 APPLY-A-LINE INC	236699	PAYREQ2-235-2019	11/20/2019	12/22/19	80,822.90	
Invoice: PAYREQ2-235-2019				80,822.90	73111264 54810000235	2019 ROAD STRIPING	ROAD STRIPING-CONTRACT WORK		
								CHECK 352348 TOTAL:	80,822.90
352349	12/26/2019	PRTD	7821 AUS WEST LOCKBOX	236675	1991511796	11/21/2019	12/22/19	53.99	
Invoice: 1991511796				53.99	73638893 589310	PW/LAUNDRY SERVICE	LAUNDRY SERVICES		
				236676	1991521775	11/28/2019	12/22/19	53.99	
Invoice: 1991521775				53.99	73638893 589310	PW/LAUNDRY SERVICE	LAUNDRY SERVICES		

CASH ACCOUNT: 635	111100	CASH							
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
						INVOICE DTL DESC			
352356	12/26/2019	PRTD	55 SOUND PUBLISHING, IN	236689	7959440	11/30/2019		12/22/19	91.32
			Invoice: 7959440			HR/AD: WWTP OPERATOR			
				91.32	33011161 544000	HR-C/E-ADVERTISING			
						CHECK		352356 TOTAL:	91.32
352357	12/26/2019	PRTD	55 SOUND PUBLISHING, IN	236820	7959124	11/30/2019		12/22/19	87.50
			Invoice: 7959124			POL/CLASSIFIEDS/PROPERTY			
				87.50	51011191 544000	PD-C/E-PROP RM-ADVERTISING			
						CHECK		352357 TOTAL:	87.50
352358	12/26/2019	PRTD	57 BAY HAY & FEED	236822	1489205	12/16/2019		12/22/19	28.23
			Invoice: 1489205			ENG/HAY BALES (2)			
				28.23	72431831 531100	ENG - SSWM ADM SUPPLIES			
						CHECK		352358 TOTAL:	28.23
352359	12/26/2019	PRTD	50 BAINBRIDGE ISLAND EL	236682	20190120	11/27/2019		12/22/19	959.57
			Invoice: 20190120			PW/WWTP PUMP REPAIR			
				959.57	73425358 548100	O&M-WWTP-REPAIRS			
						CHECK		352359 TOTAL:	959.57
352360	12/26/2019	PRTD	9262 BOULDER PARK INC	236824	3184	12/09/2019		12/22/19	4,947.29
			Invoice: 3184			BOIDOLIDS MANAGEMENT/DISPOSAL			
				4,947.29	73425358 54790100551	BIOSOLIDS WASTE DISPOSAL			
						CHECK		352360 TOTAL:	4,947.29
352361	12/26/2019	PRTD	8747 SEATTLE SEWING SOLUT	236825	201911SU269	11/25/2019		12/22/19	550.60
			Invoice: 201911SU269			POL/JUMPSUIT: JOHNSON			
				550.60	53011212 520000	POLICE - C/E PATROL BENEFITS			
						CHECK		352361 TOTAL:	550.60
352362	12/26/2019	PRTD	9327 BROWN, DANIEL	236463	82618	12/10/2019		12/22/19	172.05
			Invoice: 82618			UB 10025 689 PIERCE COURT NW			
				172.05	411 122100	WATER ACCOUNTS RECEIVABLE			
						CHECK		352362 TOTAL:	172.05

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
								CHECK 352367 TOTAL:	1,358.67
352368	12/26/2019	PRTD	9348 CHRISTOFF, VANESSA	236413	82569	12/04/2019		12/22/19	35.27
			Invoice: 82569			UB 13002 315 ASHBURY COURT NW			
				35.27	411 122100	WATER ACCOUNTS RECEIVABLE			
								CHECK 352368 TOTAL:	35.27
352369	12/26/2019	PRTD	8253 CHS NORTHWEST	236921	37109/H	12/06/2019		12/22/19	912.24
			Invoice: 37109/H			PW/SALT BAGS (98)			
				912.24	73637892 531100	O&M-ALLOC-WTR-CONSUMABLES			
								CHECK 352369 TOTAL:	912.24
352370	12/26/2019	PRTD	103 CITY OF BAINBRIDGE I	236834	21900255	12/13/2019		12/22/19	72.00
			Invoice: 21900255			BACKFLOW FOR 7305 HIDDEN COVE			
				72.00	91011897 547500	GG-C/E-O&M YARD FAC-BACKFLOW			
				236835	21900259	12/13/2019		12/22/19	125.15
			Invoice: 21900259			PW/WELL WATER USE NOV 2019			
				29.20	73111290 547500	O&M-STREET-ADM OH-CITY WTR/SWR			
				47.45	73421355 547500	O&M-SWR-CITY WATER/SEWER BILL			
				48.50	73431835 547500	O&M-SSWM MAINT-CITY WTR/SWR			
								CHECK 352370 TOTAL:	197.15
352371	12/26/2019	PRTD	104 CITY OF BREMERTON	236836	BPD0002511	11/26/2019		12/22/19	200.00
			Invoice: BPD0002511			POL/RANGE RENTAL			
				200.00	53011212 545000	POLICE - C/E PATROL RENTS			
								CHECK 352371 TOTAL:	200.00
352372	12/26/2019	PRTD	104 CITY OF BREMERTON	236691	BKAT000516	12/03/2019		12/22/19	2,840.75
			Invoice: BKAT000516			IT/BKAT NOV 2019			
				2,840.75	81011881 542420	IT-C/E-TELEVISTED COUNCIL MEET			
								CHECK 352372 TOTAL:	2,840.75
352373	12/26/2019	PRTD	7823 CIVICPLUS	236692	194772	12/09/2019		12/22/19	652.87
			Invoice: 194772			IT/SOFTWARE LIC FOR PUB NOTICES			
				652.87	81011881 535100	IT - C/E COMPUTER SOFTWARE			
								CHECK 352373 TOTAL:	652.87

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CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
352374	12/26/2019	PRTD	518 WA ST CRIMINAL JUSTI	236837	201133626	12/05/2019	12/22/19	3,347.00
	Invoice: 201133626					POL/BLEA: NOEL		
				3,347.00	53011212	443410	POLICE - C/E PATROL TRAINING	
						CHECK	352374 TOTAL:	3,347.00
352375	12/26/2019	PRTD	8024 CLEARWAY ENVIRONMENT	236858	18_23_COBI-ROCK-1	11/06/2019	12/22/19	13,024.75
	Invoice: 18_23_COBI-ROCK-1					EEL GRASS MONITORING THROUGH 1		
				13,024.75	72011391	54110000710	ROCKAWAY-MIT/MONITORING-P SVCS	
						CHECK	352375 TOTAL:	13,024.75
352376	12/26/2019	PRTD	8111 COMMUNITY SOLAR SOLU	236693	NOV-19	12/02/2019	12/22/19	231.78
	Invoice: NOV-19					NOV19 SOLAR NET METERING		
				231.78	91011189	54500000627	CH SOLAR-NET METERING PYMTS	
						CHECK	352376 TOTAL:	231.78
352377	12/26/2019	PRTD	7509 CONSTRUCTION PARTS L	236922	26789	12/04/2019	12/22/19	1,305.67
	Invoice: 26789					PW/BROOM		
				1,305.67	73111423	531100	OFFICE SUPPLIES	
						CHECK	352377 TOTAL:	1,305.67
352378	12/26/2019	PRTD	9357 CONVIS, GARY	236800	82948	12/17/2019	12/22/19	156.25
	Invoice: 82948					UB 13057 4884 DOTSON LOOP		
				156.25	421	122100	SEWER ACCOUNTS RECEIVABLE	
						CHECK	352378 TOTAL:	156.25
352379	12/26/2019	PRTD	4950 CORRECT EQUIPMENT IN	236694	40705	12/04/2019	12/22/19	267.32
	Invoice: 40705					PW/SIS SUPPLIES		
				267.32	73426355	531100	O&M-SIS-SUPPLIES	
				236695	40395		10/25/2019	12/22/19
	Invoice: 40395					PW/SIS TRAINING X4		100.00
				100.00	73426355	443410	O&M-SIS-TRAINING	
						CHECK	352379 TOTAL:	367.32
352380	12/26/2019	PRTD	9343 COSMAN, DAVID	236408	82564	12/04/2019	12/22/19	159.81
	Invoice: 82564					UB 10450 239 SHANNON DRIVE SE		
				159.81	411	122100	WATER ACCOUNTS RECEIVABLE	
				236799	82947		12/17/2019	12/22/19
								61.52

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
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Invoice: 82947								
			61.52	411	122100	UB 10450 239 SHANNON DRIVE SE		
						WATER ACCOUNTS RECEIVABLE		
						CHECK	352380 TOTAL:	221.33
352381	12/26/2019	PRTD	1596	CUMMINS INC	236697	01-58085	11/26/2019	12/22/19
	Invoice: 01-58085						PW/WATER PUMP KIT, THERMOSTAT	893.33
			893.33	73421355	531100	WIN COLL-SUPPLIES		
						CHECK	352381 TOTAL:	893.33
352382	12/26/2019	PRTD	6363	LN CURTIS & SONS	236838	INV339803	11/27/2019	12/22/19
	Invoice: INV339803						POL/CARRIER: NOEL	234.35
			234.35	53011212	520000	POLICE - C/E PATROL BENEFITS		
								234.35
Invoice: INV340649								
			236839	INV340649			11/27/2019	12/22/19
							POL/POUCHES: VARIOUS	429.32
			429.32	53011212	531100	PD-C/E-PATROL SUPPLIES		
								1,098.08
Invoice: INV341719								
			236840	INV341719			12/05/2019	12/22/19
							POL/ARMOR: BURNHAM	1,098.08
			1,098.08	53011212	53110000499	BVP-BULLETPROOF VESTS-PURCHASE		
								212.71
Invoice: INV340496								
			236841	INV340496			11/27/2019	12/22/19
							POL/UNIFORMS: BURNHAM	212.71
			212.71	53011212	520000	POLICE - C/E PATROL BENEFITS		
								249.08
Invoice: INV339809								
			236842	INV339809			11/27/2019	12/22/19
							POL/CARRIERS: HUSKA	249.08
			249.08	53011212	520000	POLICE - C/E PATROL BENEFITS		
								187.04
Invoice: INV338856								
			236843	INV338856			11/25/2019	12/22/19
							POL/HOLSTER: NOEL	187.04
			187.04	53011212	531100	PD-C/E-PATROL SUPPLIES		
								97.85
Invoice: INV338828								
			236844	INV338828			11/25/2019	12/22/19
							POL/DUTY BELT: SHIELDS	97.85
			97.85	53011212	520000	POLICE - C/E PATROL BENEFITS		
								-178.77
Invoice: CM19141								
			236845	CM19141			11/12/2019	12/22/19
							POL/CREDIT ON RETND FLASHLIGHT	-178.77
			-178.77	53011212	531100	PD-C/E-PATROL SUPPLIES		
							CHECK	352382 TOTAL:
								2,329.66
352383	12/26/2019	PRTD	7016	CUSTOM PRINTING	236846	9003	11/27/2019	12/22/19
	Invoice: 9003						EX,PCD/BIZ CARDS: SNYDER, DALTON	135.71
			67.85	31011131	531100	EX-GF-SUPPLIES		
			67.86	63470588	531100	CUR - DEV DEV PLAN OFC SUPPLY		

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
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INVOICE DTL DESC								
							CHECK 352383 TOTAL:	135.71
352384	12/26/2019	PRTD	7906 DLT SOLUTIONS, LLC	236701	4798818A	12/10/2019	12/22/19	5,741.58
			Invoice: 4798818A				IT/CAD SIFTFWARE SUBX UPDATES	
				5,741.58	81011881	548500	IT - C/E COMPUTER SUPPORT	
							CHECK 352384 TOTAL:	5,741.58
352385	12/26/2019	PRTD	4186 DMCJA	236702	2020-MCCULLOCH	12/05/2019	12/22/19	500.00
			Invoice: 2020-MCCULLOCH				CRT/2020 DUES: MCCULLOCH	
				500.00	21011125	549100	COURT-DUES/SUBSCR/MEMBERSHIPS	
							CHECK 352385 TOTAL:	500.00
352386	12/26/2019	PRTD	9354 DPE SYSTEMS, INC	236703	5828	12/11/2019	12/22/19	5,450.00
			Invoice: 5828				IT/NETWORK INFRASTRUCTURE SUPPORT	
				5,450.00	81011881	548500	IT - C/E COMPUTER SUPPORT	
							CHECK 352386 TOTAL:	5,450.00
352387	12/26/2019	PRTD	8975 ECONORTHWEST	236705	21495	08/31/2019	12/22/19	3,587.00
			Invoice: 21495				INCLUSIONARY ZONING AND TDR	
				3,587.00	61011586	54110000930	COMP PLAN IMPL-PROF SVCS	
							CHECK 352387 TOTAL:	3,587.00
352388	12/26/2019	PRTD	9344 ELLICK, KAREN H	236409	82565	12/04/2019	12/22/19	43.95
			Invoice: 82565				UB 10691 924 BLUE HERON AVENUE NE	
				43.95	411	122100	WATER ACCOUNTS RECEIVABLE	
							CHECK 352388 TOTAL:	43.95
352389	12/26/2019	PRTD	4174 ENVIRO-CLEAN EQUIPME	236706	S19-112209	11/22/2019	12/22/19	78.25
			Invoice: S19-112209				PW/SUPPORT NOZZLE CAMERA	
				78.25	73637945	531100	O&M ALLOC-SWEEPER-SUPPLIES	
				236707	S19-111902	11/19/2019	12/22/19	226.44
			Invoice: S19-111902				PW/120 DEGREE CAMERA	
				226.44	73637945	531100	O&M ALLOC-SWEEPER-SUPPLIES	
							CHECK 352389 TOTAL:	304.69

CASH ACCOUNT: 635	111100	CASH								
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352390	12/26/2019	PRTD	8336 ENVIROISSUES, INC.	236847	240-004-000-1	12/12/2019		12/22/19	1,647.90	
	Invoice: 240-004-000-1							EX/PROF SVCS: WYATT & SPORTSMAN CLB		
				823.95	72321953 64245000708			WYATT-MAD TO LOVELL-OUTREACH		
				823.95	72321953 64245000715			SP CLUB/NB INTERSECTN-OUTREACH		
								CHECK 352390 TOTAL:	1,647.90	
352391	12/26/2019	PRTD	7510 EXPERIAN	236848	CD2008001887	11/29/2019		12/22/19	92.88	
	Invoice: CD2008001887							POL/INFO SVCS		
				92.88	52011212 549100			PD-C/E-INV-DUES/SUBSCR/MEMBRSH		
								CHECK 352391 TOTAL:	92.88	
352392	12/26/2019	PRTD	1953 FERGUSON ENTERPRISES	236708	0832730	11/25/2019		12/22/19	59.95	
	Invoice: 0832730							PW/STRZ HYD WRCH(2)		
				59.95	73411345 531100			OFFICE SUPPLIES		
				236709	0831177	11/25/2019		12/22/19	30.07	
	Invoice: 0831177							PW/PLUMBING SUPPLIES		
				30.07	73011897 531100			O&M-C/E-PWY FAC-SUPPLIES		
								CHECK 352392 TOTAL:	90.02	
352393	12/26/2019	PRTD	8709 PLATFORM DESIGN LLC	236924	2-2019	11/30/2019		12/22/19	11,450.50	
	Invoice: 2-2019							ISLAND CENTER SUBAREA PLANNING		
				11,450.50	61011586 54110000930			COMP PLAN IMPL-PROF SVCS		
				236925	1-2019	11/30/2019		12/22/19	1,937.75	
	Invoice: 1-2019							ISLAND CENTER SUBAREA PLANNING		
				1,937.75	61011586 54110000930			COMP PLAN IMPL-PROF SVCS		
								CHECK 352393 TOTAL:	13,388.25	
352394	12/26/2019	PRTD	9352 FRONTIER PRECISION,	236711	205679	12/09/2019		12/22/19	2,175.01	
	Invoice: 205679							IT/GIS DATA CORRECTION DEVICE		
				2,175.01	81011881 535500			IT - C/E COMPUTER PARTS & EQ		
								CHECK 352394 TOTAL:	2,175.01	
352395	12/26/2019	PRTD	8095 GUNARAMA WHOLESAL,	236875	1007290	11/26/2019		12/22/19	2,849.26	
	Invoice: 1007290							POL/GLOCK GEN5 M.O.S X6		
				2,849.26	53011212 531100			PD-C/E-PATROL SUPPLIES		
								CHECK 352395 TOTAL:	2,849.26	

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
352396	12/26/2019	PRTD	231 GALLS, LLC	236850	014371917	11/27/2019	12/22/19	163.50
			Invoice: 014371917			POL/LIFE SAVING BARS X10		
				163.50	51011211	531100	PD-C/E-ADM-SUPPLIES	
				236851	014238184	11/12/2019	12/22/19	39.41
			Invoice: 014238184			POL/NAME TAG: BURNHAM		
				39.41	53011212	520000	POLICE - C/E PATROL BENEFITS	
						CHECK	352396 TOTAL:	202.91
352397	12/26/2019	PRTD	1517 GUARDIAN SECURITY SY	236852	971774	12/01/2019	12/22/19	260.52
			Invoice: 971774			POL/ALARM MONITORING		
				260.52	51011215	541100	POLICE - C/E FACIL PROF SVCS	
						CHECK	352397 TOTAL:	260.52
352398	12/26/2019	PRTD	252 H.D. FOWLER COMPANY	236713	I5334079	11/13/2019	12/22/19	503.86
			Invoice: I5334079			PW/AIR-VAC VALVES, HOSE BIBB		
				503.86	73011897	531100	O&M-C/E-PWY FAC-SUPPLIES	
						CHECK	352398 TOTAL:	503.86
352399	12/26/2019	PRTD	4850 HOME DEPOT CREDIT SE	236714	5065698	11/24/2019	12/22/19	98.10
			Invoice: 5065698			PW/DRILL BIT SHARPENER		
				98.10	73425358	531100	O&M-WWTP-SUPPLIES	
				236854	5010663	11/14/2019	12/22/19	301.23
			Invoice: 5010663			PW/LUMBER, SKILL SAW, SCREWS		
				205.97	73011189	531100	O&M - C/E FACIL OFC SUPPLIES	
				95.26	73011183	531100	O&M-C/E-CH FAC-SUPPLIES	
						CHECK	352399 TOTAL:	399.33
352400	12/26/2019	PRTD	7586 INSTITUTE OF MANAGEM	236715	1011867220	12/03/2019	12/22/19	260.00
			Invoice: 1011867220			FIN/MEMBERSHIP RENEWAL: KD		
				260.00	41011141	549100	FIN-C/E-DUES, SUBS, MEMBERSHIPS	
						CHECK	352400 TOTAL:	260.00
352401	12/26/2019	PRTD	8381 INVINTUS MEDIA, INC	236717	7874	12/06/2019	12/22/19	87.86
			Invoice: 7874			IT/STREAMING MEDIA HOSTING NOV19		
				87.86	81011881	548500	IT - C/E COMPUTER SUPPORT	
						CHECK	352401 TOTAL:	87.86

CASH ACCOUNT: 635	111100	CASH								
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352402	12/26/2019	PRTD	8646 ISLAND HANDS	236856	17470	12/03/2019		12/22/19	1,665.25	
			Invoice: 17470							
						DEC 2019 JANITORIAL CONTRACT				
				1,615.29	73011183	54110000269	JANITORIAL CONTRACT-PRO SVCS			
				49.96	73425358	54110000269	JANITORIAL CONTRACT-PRO SVCS			
						12/03/2019		12/22/19	9,728.79	
			Invoice: 17471							
						DEC 2019 JANITORIAL CONTRACT				
				9,300.19	73011183	54110000269	JANITORIAL CONTRACT-PRO SVCS			
				428.60	73425358	54110000269	JANITORIAL CONTRACT-PRO SVCS			
								CHECK	352402 TOTAL:	11,394.04
352403	12/26/2019	PRTD	3114 JOHNSON CONTROLS FIR	236719	21313880	11/20/2019		12/22/19	139.56	
			Invoice: 21313880							
						PW/SS ALARM MONIT				
				139.56	73011755	54110000390	FAC BLDG/FIRE ALARM-COMMONS			
						11/20/2019		12/22/19	278.46	
			Invoice: 21313883							
						PW/CH ALARM MONIT				
				278.46	73011183	54110000390	FAC BLDG/FIRE ALARM-CITY HALL			
						11/20/2019		12/22/19	139.56	
			Invoice: 21313881							
						PW/SHOP ALARM MONIT				
				139.56	73011897	54110000390	PWY-ALARM SVCS			
								CHECK	352403 TOTAL:	557.58
352404	12/26/2019	PRTD	7482 JUDGE PLUMBING CO/JP	236722	120219849	12/02/2019		12/22/19	196.25	
			Invoice: 120219849							
						PW/COMMODORE WELL HOUSE REPAIR				
				196.25	73411345	548100	REPAIRS & MAINTENANCE			
								CHECK	352404 TOTAL:	196.25
352405	12/26/2019	PRTD	333 KITSAP COUNTY AUDITO	236723	468477	11/12/2019		12/22/19	105.50	
			Invoice: 468477							
						PCD/NTT: BLD24052 ADD/ALT				
				105.50	63470588	551000	CUR-DEV PLAN-RECORDING FEES			
								CHECK	352405 TOTAL:	105.50
352406	12/26/2019	PRTD	6477 KITSAP COUNTY	236860	NOXWEED_2019_5	12/13/2019	21700171	12/22/19	40,000.00	
			Invoice: NOXWEED_2019_5							
						NOXIOUS WEED ILA				
				40,000.00	72011316	541100	ENG-GF-NOXIOUS WEED CONTROL			
						12/13/2019		12/22/19	1,720.00	
			Invoice: NOXWEED_2019_5-A							
						NOXIOUS WEED ILA				
				1,720.00	72011316	541100	ENG-GF-NOXIOUS WEED CONTROL			

CASH ACCOUNT: 635	111100	CASH							
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								CHECK 352406 TOTAL:	41,720.00
352407	12/26/2019	PRTD	1496 KITSAP COUNTY SEWER	236868	KCSD7-COBI-2019-DEC	12/01/2019		12/22/19	20,228.53
			Invoice: KCSD7-COBI-2019-DEC			PW/344.55 ERUS @ 58.71			
				20,228.53	73426356	551000	SIS-SD#7 PROCESSING CHGS		
								CHECK 352407 TOTAL:	20,228.53
352408	12/26/2019	PRTD	1971 KELLEY IMAGING SYSTE	236724	IN610719	12/06/2019		12/22/19	96.28
			Invoice: IN610719			CRT/COPIER OVERAGE			
				96.28	21011125	545000	COURT - RENTS & LEASES - OPER		
352408				236867	IN611771	12/10/2019		12/22/19	1,154.07
			Invoice: IN611771			ENG/TOS4505AC OVERAGE			
				1,154.07	72011321	545000	ENG - C/E ADMIN RENTS & LEASES		
								CHECK 352408 TOTAL:	1,250.35
352409	12/26/2019	PRTD	1971 KELLEY IMAGING SYSTE	236732	26090010	12/12/2019		12/22/19	239.26
			Invoice: 26090010			PCD/E-STUDIO4555C LEASE			
				239.26	61470581	545000	PCD - DEV ADMIN RENTS & LEASES		
352409				236866	25961679	11/21/2019		12/22/19	283.78
			Invoice: 25961679			ENG/E-STUDIO4505AC LEASE			
				283.78	72011321	545000	ENG - C/E ADMIN RENTS & LEASES		
								CHECK 352409 TOTAL:	523.04
352410	12/26/2019	PRTD	9338 KEY CODE MEDIA, INC.	236725	Q005819	12/02/2019		12/22/19	1,775.51
			Invoice: Q005819			IT/CC APPLICATION SUPPORT HARDWARE			
				1,775.51	81031881	53550000567	PEG CAP FUNDING-NON CAP ITEMS		
								CHECK 352410 TOTAL:	1,775.51
352411	12/26/2019	PRTD	1802 KITSAP CONSERVATION	236865	2019-3	11/02/2019		12/22/19	7,597.84
			Invoice: 2019-3			FARMLAND SSWM PLANNING			
				3,798.92	72011593	55100000871	FARMLAND SSWM PLANNING-KCDONLY		
				3,798.92	72431835	55100000871	FARMLAND SSWM PLANNING-KCDONLY		
								CHECK 352411 TOTAL:	7,597.84
352412	12/26/2019	PRTD	2421 KITSAP PUBLIC HEALTH	236909	315219	11/26/2019		12/22/19	870.00
			Invoice: 315219			PW/SOLID WASTE HANDLING PERMIT			
				870.00	73435838	549800	O&M-DECANT-PERMITS		

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
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INVOICE DTL DESC									
								CHECK 352412 TOTAL:	870.00
352413	12/26/2019	PRTD	309 KITSAP TIRE CENTER I	236726 224879	11/22/2019		12/22/19	6.54	
Invoice: 224879				6.54 91011897 547900	PW/SCRAP TIRE DISPOSAL				
					GG-C/E-O&M YARD FAC-GARBAGE				
				236727 224761	11/15/2019		12/22/19	10.90	
Invoice: 224761				10.90 91011897 547900	PW/SCRAP TIRE DISPOSAL				
					GG-C/E-O&M YARD FAC-GARBAGE				
				236729 224729	11/14/2019		12/22/19	640.56	
Invoice: 224729				640.56 53011212 531100	POL/237 TIRES				
					PD-C/E-PATROL SUPPLIES				
								CHECK 352413 TOTAL:	658.00
352414	12/26/2019	PRTD	6149 LANGUAGE LINE SERVIC	236730 4701162	11/30/2019		12/22/19	27.15	
Invoice: 4701162				27.15 21011125 541230	CRT/INTERPRETATION SVCS				
					COURT - INTERPRETER				
								CHECK 352414 TOTAL:	27.15
352415	12/26/2019	PRTD	6889 LEADS ONLINE LLC	236869 253642	12/15/2019		12/22/19	1,758.00	
Invoice: 253642				1,758.00 52011212 549100	POL/ANNUAL SUBX				
					PD-C/E-INV-DUES/SUBSCR/MEMBRSH				
								CHECK 352415 TOTAL:	1,758.00
352416	12/26/2019	PRTD	8375 MOORE IACOFANO GOLTS	236871 0061912	12/06/2019		12/22/19	3,061.22	
Invoice: 0061912				3,061.22 72334951 66300300596	CONSTRUCTION ADMINISTRATION SU				
					SR305-OLYMPIC NM-CONSTR PH ENG				
				236872 0061672	11/20/2019		12/22/19	51,476.50	
Invoice: 0061672				51,476.50 72321951 64110000708	DESIGN OF WYATT WAY RECONSTRUC				
					WYATT-MAD TO LOVELL-ENG/DESIGN				
				236873 0061631	11/20/2019	21700052	12/22/19	2,622.50	
Invoice: 0061631				2,622.50 72413434 64110000708	WYATT WAY WATER MAIN DSN				
					WYATT-MAD TO LOVELL-WTR-ENG				
				236874 0061625	11/19/2019		12/22/19	3,860.45	
Invoice: 0061625				3,860.45 72334951 66300300596	CONSTRUCTION ADMINISTRATION SU				
					SR305-OLYMPIC NM-CONSTR PH ENG				
								CHECK 352416 TOTAL:	61,020.67

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
CHECK NO	CHK DATE	TYPE	VENDOR NAME						
INVOICE DTL DESC									
								CHECK 352429 TOTAL:	229.59
352430	12/26/2019	PRTD	1864 PUGET SOUND CLEAN AI	236742	20202512	11/18/2019	12/22/19	140.00	
Invoice: 20202512				140.00	73011897 549100	PW/FUEL FACILITY REG FEES 2020 O&M-C/E-PWYD FAC-DUES/SUBCRIP			
								CHECK 352430 TOTAL:	140.00
352431	12/26/2019	PRTD	1205 PUGET SOUND ENERGY	236743	3319NOV19	12/09/2019	12/22/19	16.13	
Invoice: 3319NOV19				16.13	73416345 547100	PW/CASEY ST WATER CASEY STREET WTR-ELECTRICITY			
				236744	9932NOV19	12/09/2019	12/22/19	10.43	
Invoice: 9932NOV19				10.43	91011739 547100	184 WINSLOW WAY E COMM EVENTS-ELECTRICITY			
								CHECK 352431 TOTAL:	26.56
352432	12/26/2019	PRTD	7187 RANDOLPH BAUER	236881	1911108	12/05/2019	12/22/19	180.00	
Invoice: 1911108				180.00	73011768 545000	PW/EAGLE HARBOR CANS O&M-C/E-PARKS-OP LEASES			
				236882	1911109	12/05/2019	12/22/19	90.00	
Invoice: 1911109				90.00	73011768 545000	PW/CREOSOTE CAN O&M-C/E-PARKS-OP LEASES			
				236883	1911110	12/05/2019	12/22/19	90.00	
Invoice: 1911110				90.00	73435838 545000	PW/VINCENT RD CAN O&M-DECANT-RENTS			
				236884	1911111	12/05/2019	12/22/19	90.00	
Invoice: 1911111				90.00	73011897 545000	PW/SHOP CAN O&M-C/E-PWYD FAC-RENTS			
								CHECK 352432 TOTAL:	450.00
352433	12/26/2019	PRTD	9355 RESOUND PROPERTIES L	236796	82944	12/17/2019	12/22/19	178.13	
Invoice: 82944				178.13	411 122100	UB 10624 310 WYATT WAY NW WATER ACCOUNTS RECEIVABLE			
								CHECK 352433 TOTAL:	178.13
352434	12/26/2019	PRTD	9326 ROSEN, MICHAEL	236797	82945	12/17/2019	12/22/19	27.25	
Invoice: 82945				27.25	411 122100	UB 10118 1415 ELIZABETH PLACE NW WATER ACCOUNTS RECEIVABLE			

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
							CHECK 352434 TOTAL:	27.25
352435	12/26/2019	PRTD	9040 SHORELINE SOLUTIONS	236745	PLN51296A SSDE	12/11/2019	12/22/19	572.00
			Invoice: PLN51296A SSDE				REFUND: CANCELLED PERMIT PLN51296A	
				572.00	47047	345890	OTHER PLANNING/DEVELOPM	
							CHECK 352435 TOTAL:	572.00
352436	12/26/2019	PRTD	4689 SITESTAR.NET	236746	6825860	12/09/2019	12/22/19	6,165.00
			Invoice: 6825860				IT/QUARTERLY WAN-ISP	
				6,165.00	81011881	545000	IT - C/E RENTS & LEASES	
							CHECK 352436 TOTAL:	6,165.00
352437	12/26/2019	PRTD	7173 SKILLINGS CONNOLLY I	236886	12153	12/05/2019	12/22/19	9,226.20
			Invoice: 12153				SPORTSMAN CLUB & NEW BROOKLYN	
				9,226.20	72321953	64110000715	SP CLUB/NB INTERSECTN-DESIGN	
							CHECK 352437 TOTAL:	9,226.20
352438	12/26/2019	PRTD	8040 SOLENIS LLC	236926	131553092	12/04/2019	12/22/19	4,468.02
			Invoice: 131553092				PW/PRAESTOL	
				4,468.02	73425358	531100	O&M-WWTP-SUPPLIES	
							CHECK 352438 TOTAL:	4,468.02
352439	12/26/2019	PRTD	9351 SOUND EXPERIENCE	236747	12/5/19	12/05/2019	12/22/19	150.00
			Invoice: 12/5/19				DAMAGE DEP REFUND: 12/5	
				150.00	41625860	586000	SC/COMMONS ROOM DEP-DISBURSEME	
							CHECK 352439 TOTAL:	150.00
352440	12/26/2019	PRTD	601 SOUND REPROGRAPHICS	236748	74796	12/05/2019	12/22/19	172.77
			Invoice: 74796				CC/GHG INV FACT SHEET - OUTREACH	
				172.77	11011116	542450	COMMUNITY OUTREACH/PARTICIPA	
				236749	74407		11/18/2019	12/22/19
			Invoice: 74407				EX/NAME PLATE: DALTON	9.27
				9.27	31011131	531100	EX-GF-SUPPLIES	
				236927	74735		12/05/2019	12/22/19
			Invoice: 74735				PW/SNOW MAPS	164.42
				164.42	73111256	53110000999	2019 STORM PREP-STRT-SUPPLIES	

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

										CHECK	352440 TOTAL:	346.46
352441	12/26/2019	PRTD	8132 SPECTRA LABORATORIES	236750	19-09073	12/05/2019		12/22/19		230.00		
Invoice: 19-09073												
				230.00	73425358 54110000391	LAB & TESTING SVCS-WWTP						
				236751	19-08970	11/30/2019		12/22/19		31.05		
Invoice: 19-08970												
				31.05	73411345 54110000391	LAB SVCS-WATER						
				236752	19-08948	11/30/2019		12/22/19		62.10		
Invoice: 19-08948												
				62.10	73411345 54110000391	LAB SVCS-WATER						
				236753	19-08993	11/30/2019		12/22/19		42.32		
Invoice: 19-08993												
				42.32	73011897 54110000391	LAB SVCS-PWY FAC						
				236754	19-08946	11/30/2019		12/22/19		714.84		
Invoice: 19-08946												
				714.84	73011897 54110000391	LAB SVCS-PWY FAC						
				236755	19-08947	11/30/2019		12/22/19		293.94		
Invoice: 19-08947												
				293.94	73011897 54110000391	LAB SVCS-PWY FAC						
				236756	19-08944	11/30/2019		12/22/19		42.32		
Invoice: 19-08944												
				42.32	73415345 54110000391	LAB SVCS-WATER ROCKAWAY						
				236758	19-08971	11/30/2019		12/22/19		31.05		
Invoice: 19-08971												
				31.05	73415345 54110000391	LAB SVCS-WATER ROCKAWAY						
				236887	19-09159	12/09/2019		12/22/19		672.52		
Invoice: 19-09159												
				672.52	73011897 54110000391	LAB SVCS-PWY FAC						
				236888	19-09134	12/06/2019		12/22/19		21.16		
Invoice: 19-09134												
				21.16	73415345 54110000391	LAB SVCS-WATER ROCKAWAY						
				236889	19-09106	12/06/2019		12/22/19		146.50		
Invoice: 19-09106												
				146.50	73425358 54110000391	LAB & TESTING SVCS-WWTP						
				236890	19-09133	12/06/2019		12/22/19		105.80		
Invoice: 19-09133												
				105.80	73411345 54110000391	LAB SVCS-WATER						
				236891	19-09132	12/06/2019		12/22/19		42.32		

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						

Invoice: 19-09132					PW/ECOLI TESTING			
			42.32	73011897 54110000391	LAB SVCS-PWY FAC			
						CHECK	352441 TOTAL:	2,435.92
352442	12/26/2019	PRTD 2467 STAPLES	236759	3432553094	11/30/2019		12/22/19	42.50
Invoice: 3432553094								
			42.50	63470586 544000	PCD/OFFICE SUPPLIES			
					CUR-DEV-ZONING-ADV			
			236760	3432550395	11/30/2019		12/22/19	60.66
Invoice: 3432550395								
			60.66	63470586 544000	PCD/OFFICE SUPPLIES			
					CUR-DEV-ZONING-ADV			
			236761	3432550396	11/30/2019		12/22/19	33.26
Invoice: 3432550396								
			33.26	63470586 544000	PCD/OFFICE SUPPLIES			
					CUR-DEV-ZONING-ADV			
			236762	3432550269	11/30/2019		12/22/19	53.56
Invoice: 3432550269								
			5.10	31011131 531100	EX,FIN,PW/OFFICE SUPPLIES			
			5.10	41011141 531100	EX-GF-SUPPLIES			
			43.36	73011183 531100	FIN - C/E ADMIN SUPPLIES			
					O&M-C/E-CH FAC-SUPPLIES			
			236763	3432550280	11/30/2019		12/22/19	16.02
Invoice: 3432550280								
			16.02	41011141 531100	FIN/CALENDAR			
					FIN - C/E ADMIN SUPPLIES			
			236764	3432550275	11/30/2019		12/22/19	118.79
Invoice: 3432550275								
			16.07	31011131 531100	EX,LEGAL,FIN/OFFICE SUPPLIES			
			86.64	32011152 531100	EX-GF-SUPPLIES			
			16.08	41011141 531100	LGL-GF-SUPPLIES			
					FIN - C/E ADMIN SUPPLIES			
			236765	3432550279	11/30/2019		12/22/19	26.66
Invoice: 3432550279								
			13.33	31011131 531100	EX,FIN/OFFICE SUPPLIES			
			13.33	41011141 531100	EX-GF-SUPPLIES			
					FIN - C/E ADMIN SUPPLIES			
			236766	3432550276	11/30/2019		12/22/19	68.97
Invoice: 3432550276								
			68.97	31011131 531100	EX/OFFICE SUPPLIES			
					EX-GF-SUPPLIES			
			236767	3432550277	11/30/2019		12/22/19	14.99
Invoice: 3432550277								
			14.99	31011131 531100	EX/TEA			
					EX-GF-SUPPLIES			
			236768	3432550278	11/30/2019		12/22/19	-3.66
Invoice: 3432550278								
			-3.66	31011131 531100	EX/RETURNS			
					EX-GF-SUPPLIES			
			236769	3432550281	11/30/2019		12/22/19	53.89

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE VENDOR NAME						
INVOICE DTL DESC								
Invoice: 3432550281			45.52	36011143 531100				
			8.37	73011183 531100				
			236892	8056647841	11/30/2019		12/22/19	170.84
Invoice: 8056647841			170.84	72011321 531100				
			236893	3432550435	11/30/2019		12/22/19	71.06
Invoice: 3432550435			71.06	51011211 531100				
			236894	3430112772	11/02/2019		12/22/19	-428.48
Invoice: 3430112772			-428.48	73637891 531100				
			236895	3427278913	10/05/2019		12/22/19	428.48
Invoice: 3427278913			428.48	73637891 531100				
			236928	3432550361	11/30/2019		12/22/19	45.12
Invoice: 3432550361			45.12	73637891 531100				
			236929	3432550357	11/30/2019		12/22/19	138.99
Invoice: 3432550357			138.99	73637891 531100				
						CHECK	352442 TOTAL:	911.65
352443	12/26/2019	PRTD 2122 STERICYCLE INC	236896	3004915583	11/30/2019		12/22/19	20.72
		Invoice: 3004915583	20.72	51011211 541100				
						CHECK	352443 TOTAL:	20.72
352444	12/26/2019	PRTD 8833 STRATEGIC GOVERNMENT	236770	2019-101269	11/14/2019		12/22/19	11,360.06
		Invoice: 2019-101269	11,360.06	33011161 541100				
						CHECK	352444 TOTAL:	11,360.06
352445	12/26/2019	PRTD 9358 STRUCTURED COMMUNICA	236897	0202320-IN	12/12/2019		12/22/19	8,680.28
		Invoice: 0202320-IN	8,680.28	81011881 548500				
						CHECK	352445 TOTAL:	8,680.28

CASH ACCOUNT: 635	111100	CASH								
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	

						INVOICE DTL	DESC			
352446	12/26/2019	PRTD	9345 SUO-ANTTILA, BRYAN &	236410	82566	12/04/2019		12/22/19	8.28	
	Invoice: 82566					UB 11004 11278	WING POINT DRIVE NE			
				8.28	411	122100	WATER ACCOUNTS RECEIVABLE			
							CHECK	352446	TOTAL:	8.28
352447	12/26/2019	PRTD	7095 SUPERIOR SAW & SUPPL	236771	134930	12/03/2019		12/22/19	31.39	
	Invoice: 134930					PW/SHARPEN BLADES				
				31.39	73111427	548100	O&M-ACCESS RDSIDE R&M			
				236772	134775			11/26/2019	12/22/19	183.99
	Invoice: 134775					PW/SHARPEN BLADES, SAW CHAINS				
				183.99	73111427	548100	O&M-ACCESS RDSIDE R&M			
							CHECK	352447	TOTAL:	215.38
352448	12/26/2019	PRTD	4819 THOMSON REUTERS - WE	236773	841424133	11/30/2019		12/22/19	547.56	
	Invoice: 841424133					LEGAL/INFO CHARGES				
				547.56	32011152	549100	LGL-GF-DUES & SUBSCRIPTIONS			
							CHECK	352448	TOTAL:	547.56
352449	12/26/2019	PRTD	9340 TOLBERT, CEANNA	236405	82561	12/04/2019		12/22/19	386.65	
	Invoice: 82561					UB 10632 750	MADISON AVENUE N			
				386.65	411	122100	WATER ACCOUNTS RECEIVABLE			
							CHECK	352449	TOTAL:	386.65
352450	12/26/2019	PRTD	6714 TOSHIBA FINANCIAL SE	236898	26105282	12/16/2019		12/22/19	234.42	
	Invoice: 26105282					POL/E-STUDIO4515AC LEASE				
				234.42	51011211	545000	PD-C/E-ADMIN RENTS/LEASE			
							CHECK	352450	TOTAL:	234.42
352451	12/26/2019	PRTD	6714 TOSHIBA FINANCIAL SE	236774	26090009	12/12/2019		12/22/19	353.16	
	Invoice: 26090009					PCD/E-STUDIO6560C LEASE				
				353.16	61470581	545000	PCD - DEV ADMIN RENTS & LEASES			
							CHECK	352451	TOTAL:	353.16
352452	12/26/2019	PRTD	8010 JOSEPH W. TOVAR	236930	1902-1	12/07/2019		12/22/19	2,300.00	
	Invoice: 1902-1					PCD/DRB TRAINING				
				2,300.00	61011584	443410	PCD - C/E ADM TRAINING			

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK	352452	TOTAL:	2,300.00				
352453	12/26/2019	PRTD	8183 JOHN A. GREEN	236931 15533	10/23/2019	12/22/19	147.90
Invoice: 15533							
PW/VEH 261 LOGOS							
147.90 73638594 66400000978 2019 ENG 4X4 P/U-EQ REPL							
CHECK	352453	TOTAL:	147.90				
352454	12/26/2019	PRTD	2190 UNITED PARCEL SERVIC	236901 000028Y3Y1499	12/07/2019	12/22/19	12.91
Invoice: 000028Y3Y1499							
POL/SHIPPING							
12.91 91011215 542500 GG-C/E-PD-POSTAGE							
352454	12/26/2019	PRTD	2190 UNITED PARCEL SERVIC	236902 000028Y3Y1479-2019	11/23/2019	12/22/19	25.29
Invoice: 000028Y3Y1479-2019							
POL/SHIPPING							
25.29 91011215 542500 GG-C/E-PD-POSTAGE							
CHECK	352454	TOTAL:	38.20				
352455	12/26/2019	PRTD	2425 THE UPS STORE #1265	236932 12/12/19	12/12/2019	12/22/19	123.07
Invoice: 12/12/19							
PW/SHIPPING							
123.07 91421891 542500 GG-SWR-FAC-POSTAGE							
CHECK	352455	TOTAL:	123.07				
352456	12/26/2019	PRTD	9350 URNESS, LOUISE C	236464 82619	12/10/2019	12/22/19	41.32
Invoice: 82619							
UB 12993 953 CURTIS LOOP NE							
41.32 411 122100 WATER ACCOUNTS RECEIVABLE							
CHECK	352456	TOTAL:	41.32				
352457	12/26/2019	PRTD	1152 USA BLUE BOOK	236903 078369	11/26/2019	12/22/19	1,984.89
Invoice: 078369							
PW/WATER METER SUPPLIES							
1,984.89 73637892 531100 O&M-ALLOC-WTR-CONSUMABLES							
352457	12/26/2019	PRTD	1152 USA BLUE BOOK	236933 082367	12/03/2019	12/22/19	485.65
Invoice: 082367							
PW/BUFFER PACKS, STIR BARS, MEMBRANES							
485.65 73425358 531100 O&M-WWTP-SUPPLIES							
CHECK	352457	TOTAL:	2,470.54				
352458	12/26/2019	PRTD	553 UTILITIES UNDERGROUN	236775 9110123	11/30/2019	12/22/19	143.19
Invoice: 9110123							
PW/EXCAVATION NOTICES NOV 2019							
143.19 73637893 54110000393 O&M ALLOC-LOCATING SVCS							

CASH ACCOUNT: 635	111100	CASH							
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC									
								CHECK 352458 TOTAL:	143.19
352459	12/26/2019	PRTD	4126 VIKING FENCE COMPANY	236904	19-0988	12/06/2019		12/22/19	1,667.70
			Invoice: 19-0988			PW/FENCE REPAIR			
				1,667.70	73411345 548100	REPAIRS & MAINTENANCE			
								CHECK 352459 TOTAL:	1,667.70
352460	12/26/2019	PRTD	5402 VIRTUAL GRAFFITI INC	236776	428978	12/04/2019		12/22/19	2,213.70
			Invoice: 428978			IT/WEB FILTER SW UPDATES			
				2,213.70	81011881 548500	IT - C/E COMPUTER SUPPORT			
								CHECK 352460 TOTAL:	2,213.70
352461	12/26/2019	PRTD	4761 WA ST DEPT OF AGRICU	236905	WMRS-1608	12/02/2019		12/22/19	16.80
			Invoice: WMRS-1608			POL/EVIDENCE SCALE CALIBRATION			
				16.80	53011212 541100	POLICE - C/E PATROL PROF SVCS			
								CHECK 352461 TOTAL:	16.80
352462	12/26/2019	PRTD	167 WA ST DEPT OF ECOLOG	236777	2020-BA0020907	11/25/2019		12/22/19	1,855.89
			Invoice: 2020-BA0020907			PW/BIOSOLIDS PERMIT 2020			
				1,855.89	73425358 549800	O&M-WWTP-PERMITS			
								CHECK 352462 TOTAL:	1,855.89
352463	12/26/2019	PRTD	4104 WA ST FERRIES	236778	RK338409	11/30/2019		12/22/19	403.95
			Invoice: RK338409			NOV19 WAVE2GO FERRY CHARGES			
				388.20	53011212 543100	PATROL-TRAVEL/MEALS/LODGING			
				15.75	61011581 543100	PCD - C/E ADMIN TRAVEL EXPENSE			
								CHECK 352463 TOTAL:	403.95
352464	12/26/2019	PRTD	952 WASHINGTON STATE PAT	236779	I20003531	12/04/2019		12/22/19	26.50
			Invoice: I20003531			FIN/NOV19 BACKGROUND CHECKS			
				26.50	41654861 586100	AGENCY DISBURSEMENTS			
								CHECK 352464 TOTAL:	26.50
352465	12/26/2019	PRTD	512 WABO - WASHINGTON AS	236780	MEMBER 2020	12/02/2019		12/22/19	140.00
			Invoice: MEMBER 2020			PCD/MEMBERSHIP RENEWAL			
				140.00	62471591 549100	BLDG - BLDG DUBS/SUBSCRIPTIONS			

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
							CHECK 352465 TOTAL:	140.00
352466	12/26/2019	PRTD	4513 WASTE MANAGEMENT	236781	0036279-1048-6	12/01/2019	21900056 12/22/19	4,878.17
			Invoice: 0036279-1048-6			BIOSOLIDS LANDFILL DISPOSAL		
				4,878.17	73425358	54790100551	BIOSOLIDS WASTE DISPOSAL	
							CHECK 352466 TOTAL:	4,878.17
352467	12/26/2019	PRTD	5709 WEBCHECK INC	236782	6478	11/30/2019	12/22/19	277.95
			Invoice: 6478			FIN/WEBCHECK NOV 2019		
				138.98	43411341	541100	FIN - WATER ADMIN PROF SERVICE	
				138.97	43421351	541100	FIN - SEWER ADMIN PROF SERVICE	
							CHECK 352467 TOTAL:	277.95
352468	12/26/2019	PRTD	8390 WEST HILLS FORD MAZD	236934	E5481	12/02/2019	12/22/19	62.46
			Invoice: E5481			POL/VEH 251 PARTS		
				62.46	52011212	531100	POLICE - C/E INVEST SUPPLIES	
							CHECK 352468 TOTAL:	62.46
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236783	503070	11/25/2019	12/22/19	37.05
			Invoice: 503070			PW/OIL FILTER		
				37.05	73411345	531100	OFFICE SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236906	506652	12/11/2019	12/22/19	25.68
			Invoice: 506652			PW/SHOP SUPPLIES		
				25.68	73638935	531100	O&M-STD ALLOCATION-SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236935	506245	12/10/2019	12/22/19	19.75
			Invoice: 506245			PW/V-BELT		
				9.87	73111423	531100	OFFICE SUPPLIES	
				9.88	73111427	531100	OFFICE SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236936	506227	12/10/2019	12/22/19	19.75
			Invoice: 506227			PW/V-BELT		
				19.75	73421355	531100	WIN COLL-SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236937	506251	12/10/2019	12/22/19	38.72
			Invoice: 506251			PW/SHOP TRUCK TOOLS		
				38.72	73638935	531100	O&M-STD ALLOCATION-SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236938	506139	12/09/2019	12/22/19	20.32
			Invoice: 506139			PW/TOGGLES		
				20.32	73637941	531100	VACTOR R&M-SUPPLIES	
352469	12/26/2019	PRTD	499 WESTBAY AUTO PARTS I	236939	506137	12/09/2019	12/22/19	10.25
			Invoice: 506137			PW/HEADLIGHT PIGTAIL		

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME		INVOICE DTL DESC			
			10.25	73431835 531100				
			236940	505541	12/06/2019		12/22/19	219.42
Invoice: 505541								
			219.42	53011212 531100				
			236941	505290	12/05/2019		12/22/19	21.45
Invoice: 505290								
			10.72	73111423 531100				
			10.73	73111427 531100				
			236942	505019	12/04/2019		12/22/19	166.21
Invoice: 505019								
			83.10	73111423 531100				
			83.11	73111427 531100				
			236943	504987	12/04/2019		12/22/19	28.92
Invoice: 504987								
			28.92	990 141100				
			236944	503361	11/26/2019		12/22/19	91.28
Invoice: 503361								
			78.41	73638935 531100				
			12.87	990 141100				
			236945	501994	11/20/2019		12/22/19	103.42
Invoice: 501994								
			103.42	990 141100				
			236946	502824	11/23/2019		12/22/19	-192.82
Invoice: 502824								
			-192.82	990 141100				
			236947	501411	11/18/2019		12/22/19	250.47
Invoice: 501411								
			250.47	990 141100				
			236948	500936	11/15/2019		12/22/19	23.39
Invoice: 500936								
			23.39	73638935 531100				
			236949	500446	11/13/2019		12/22/19	496.78
Invoice: 500446								
			496.78	73421355 531100				
			236950	497904	11/04/2019		12/22/19	28.90
Invoice: 497904								
			28.90	990 141100				
			236951	596192	10/28/2019		12/22/19	99.32
Invoice: 596192								
			99.32	73111256 53110000999				

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
							CHECK 352469 TOTAL:	1,508.26
352470	12/26/2019	PRTD	9346 WETZLER, BRIAN & KAR	236411 82567	12/04/2019		12/22/19	97.39
Invoice: 82567				97.39 411 122100	UB 12222 10217 GARIBALDI LOOP NE			
							CHECK 352470 TOTAL:	97.39
352471	12/26/2019	PRTD	9356 WHELAN, ROBERT & ROB	236798 82946	12/17/2019		12/22/19	209.30
Invoice: 82946				209.30 411 122100	UB 10414 320 WOOD AVENUE SW			
							CHECK 352471 TOTAL:	209.30
352472	12/26/2019	PRTD	2607 ZEE MEDICAL SERVICE	236784 68390907	11/27/2019		12/22/19	92.12
Invoice: 68390907				92.12 73637891 531100	PW/FIRST AID RESTOCK			
							CHECK 352472 TOTAL:	107.06
				236907 68390956	12/06/2019		12/22/19	14.94
Invoice: 68390956				14.94 73011755 531100	PW/FIRST AID RESTOCK			
							CHECK 352473 TOTAL:	77.93
352473	12/26/2019	PRTD	9342 ZWIRNER, DION & ADOL	236407 82563	12/04/2019		12/22/19	77.93
Invoice: 82563				77.93 411 122100	UB 10172 1177 GROW AVENUE NW			
							CHECK 352473 TOTAL:	77.93
NUMBER OF CHECKS 134								*** CASH ACCOUNT TOTAL *** 387,711.12
					COUNT	AMOUNT		
TOTAL PRINTED CHECKS					134	387,711.12		

*** GRAND TOTAL *** 387,711.12

VOID 352398 -503.86
 Reprint 352474 + 194.29
 (incl @ end of report) \$ 387,401.55
 Reg run total → 259

12/18/2019 14:39
cfreitas

|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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|apcshdeb

JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	LINE DESC			
EFF DATE	REF 1	REF 2	REF 3		
2019 12	210				
APP 401-213000		ACCOUNTS PAYABLE		7,763.01	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 635-111100		CASH			387,711.12
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 101-213000		STREETS - ACCOUNTS PAYABLE		83,800.60	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 001-213000		GENERAL - ACCOUNTS PAYABLE		165,797.50	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 403-213000		ACCOUNTS PAYABLE		4,947.90	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 402-213000		ACCOUNTS PAYABLE		42,352.99	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 631-213000		ACCOUNTS PAYABLE		9,468.63	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 301-213000		ACCOUNTS PAYABLE		69,392.27	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 407-213000		ACCOUNTS PAYABLE		2,074.83	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 901-213000		ACCOUNTS PAYABLE		1,801.14	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 650-213000		ACCOUNTS PAYABLE		162.25	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
APP 622-213000		ACCOUNTS PAYABLE		150.00	
12/26/2019	12/22/19	122619			
		AP CASH DISBURSEMENTS JOURNAL			
		GENERAL LEDGER TOTAL		387,711.12	387,711.12
APP 631-130000		DUE TO/FROM CLEARING		378,242.49	
12/26/2019	12/22/19	122619			
APP 401-130000		DUE TO/FROM CLEARING		7,763.01	
12/26/2019	12/22/19	122619			
APP 101-130000		STREETS - DUE TO/FROM CLEARING		83,800.60	
12/26/2019	12/22/19	122619			
APP 001-130000		GENERAL - DUE TO/FROM CLEARING		165,797.50	
12/26/2019	12/22/19	122619			
APP 403-130000		DUE TO/FROM CLEARING		4,947.90	
12/26/2019	12/22/19	122619			
APP 402-130000		DUE TO/FROM CLEARING		42,352.99	
12/26/2019	12/22/19	122619			
APP 301-130000		DUE TO/FROM CLEARING		69,392.27	
12/26/2019	12/22/19	122619			
APP 407-130000		DUE TO/FROM CLEARING		2,074.83	
12/26/2019	12/22/19	122619			
APP 901-130000		DUE TO/FROM CLEARING		1,801.14	
12/26/2019	12/22/19	122619			
APP 650-130000		DUE TO/FROM CLEARING		162.25	

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
	12/26/2019	12/22/19	122619			DUE TO/FROM CLEARING			150.00
APP 622-130000									
	12/26/2019	12/22/19	122619						
SYSTEM GENERATED ENTRIES TOTAL								378,242.49	378,242.49
JOURNAL 2019/12/210 TOTAL								765,953.61	765,953.61

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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|apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND ACCOUNT	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	210	12/26/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		165,797.50
001-213000				GENERAL - ACCOUNTS PAYABLE	165,797.50	
				FUND TOTAL	165,797.50	165,797.50
101 STREET FUND	2019 12	210	12/26/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		83,800.60
101-213000				STREETS - ACCOUNTS PAYABLE	83,800.60	
				FUND TOTAL	83,800.60	83,800.60
301 CAPITAL CONSTRUCTION FUND	2019 12	210	12/26/2019			
301-130000				DUE TO/FROM CLEARING		69,392.27
301-213000				ACCOUNTS PAYABLE	69,392.27	
				FUND TOTAL	69,392.27	69,392.27
401 WATER OPERATING FUND	2019 12	210	12/26/2019			
401-130000				DUE TO/FROM CLEARING		7,763.01
401-213000				ACCOUNTS PAYABLE	7,763.01	
				FUND TOTAL	7,763.01	7,763.01
402 SEWER OPERATING FUND	2019 12	210	12/26/2019			
402-130000				DUE TO/FROM CLEARING		42,352.99
402-213000				ACCOUNTS PAYABLE	42,352.99	
				FUND TOTAL	42,352.99	42,352.99
403 STORM & SURFACE WATER FUND	2019 12	210	12/26/2019			
403-130000				DUE TO/FROM CLEARING		4,947.90
403-213000				ACCOUNTS PAYABLE	4,947.90	
				FUND TOTAL	4,947.90	4,947.90
407 BUILDING & DEVELOPMENT FUND	2019 12	210	12/26/2019			
407-130000				DUE TO/FROM CLEARING		2,074.83
407-213000				ACCOUNTS PAYABLE	2,074.83	
				FUND TOTAL	2,074.83	2,074.83
622 EXPENDABLE TRUST FUND	2019 12	210	12/26/2019			
622-130000				DUE TO/FROM CLEARING		150.00
622-213000				ACCOUNTS PAYABLE	150.00	
				FUND TOTAL	150.00	150.00
631 CLEARING FUND	2019 12	210	12/26/2019			

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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|apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
631-130000				DUE TO/FROM CLEARING	378,242.49	
631-213000				ACCOUNTS PAYABLE	9,468.63	
635-111100				CASH		387,711.12
				FUND TOTAL	387,711.12	387,711.12
650 AGENCY FUND	2019 12	210	12/26/2019			
650-130000				DUE TO/FROM CLEARING		162.25
650-213000				ACCOUNTS PAYABLE	162.25	
				FUND TOTAL	162.25	162.25
901 CITY-WIDE REPORTING FUND	2019 12	210	12/26/2019			
901-130000				DUE TO/FROM CLEARING		1,801.14
901-213000				ACCOUNTS PAYABLE	1,801.14	
				FUND TOTAL	1,801.14	1,801.14

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		165,797.50
101	STREET FUND		83,800.60
301	CAPITAL CONSTRUCTION FUND		69,392.27
401	WATER OPERATING FUND		7,763.01
402	SEWER OPERATING FUND		42,352.99
403	STORM & SURFACE WATER FUND		4,947.90
407	BUILDING & DEVELOPMENT FUND		2,074.83
622	EXPENDABLE TRUST FUND		150.00
631	CLEARING FUND	378,242.49	
650	AGENCY FUND		162.25
901	CITY-WIDE REPORTING FUND		1,801.14
	TOTAL	378,242.49	378,242.49

** END OF REPORT - Generated by Carrie L. Freitas **

12/18/2019 14:58 |CITY OF BAINBRIDGE ISLAND
cfreitas |MODIFY INVOICES

|P 1
|apinvmnt

CLERK: cfreitas

INVOICE HEADER CHANGED

VENDOR DOCUMENT	CHECK RUNVOUCHER	DEPT	YR/PER	CASH ACCOUNT	TYPE	INV DATE	DISCOUNT AMOUNT	ERROR
					STAT	DUE DATE	INVOICE NET	
000252 82864		236713	410012019	12 635	111100 INV	11/13/2019	.00	
H.D. FOWLER COMPANY	RMT: 0	PW/AIR-VAC VALVES, HOSE BIBB			ACT	11/22/2019	503.86	
INVOICE: I5334079								
73011897 531100	PWY-SUPPL			N 1		503.86		

** END OF REPORT - Generated by Carrie L. Freitas **

Reg-reprint
 (CF) 12/18/19

12/18/2019 15:01 | CITY OF BAINBRIDGE ISLAND
 cfreitas | A/P CASH DISBURSEMENTS JOURNAL

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 | apcshdsb

CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
352474	12/26/2019	PRTD	252 H.D. FOWLER COMPANY	236712	C489931	11/22/2019	12/22/19	-309.57
Invoice: C489931								
				-309.57	73011897	531100	PW/AIR-VAC VALVE RETURN O&M-C/E-PWY FAC-SUPPLIES	
				236713	I5334079	11/13/2019	12/22/19	503.86
Invoice: I5334079								
				503.86	73011897	531100	PW/AIR-VAC VALVES, HOSE BIBB O&M-C/E-PWY FAC-SUPPLIES	
							CHECK 352474 TOTAL:	194.29
				NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***		194.29
						COUNT	AMOUNT	
						-----	-----	
				TOTAL PRINTED CHECKS	1		194.29	
							*** GRAND TOTAL ***	194.29

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT		JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
2019 12	213								
APP 001-213000						GENERAL - ACCOUNTS PAYABLE		194.29	
	12/26/2019	12/22/19	REPRNT			AP CASH DISBURSEMENTS JOURNAL			
APP 635-111100						CASH			194.29
	12/26/2019	12/22/19	REPRNT			AP CASH DISBURSEMENTS JOURNAL			
GENERAL LEDGER TOTAL								194.29	194.29
APP 631-130000						DUE TO/FROM CLEARING		194.29	
	12/26/2019	12/22/19	REPRNT						
APP 001-130000						GENERAL - DUE TO/FROM CLEARING			194.29
	12/26/2019	12/22/19	REPRNT						
SYSTEM GENERATED ENTRIES TOTAL								194.29	194.29
JOURNAL 2019/12/213 TOTAL								388.58	388.58

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019	12	213	12/26/2019			
001-130000					GENERAL - DUE TO/FROM CLEARING		194.29
001-213000					GENERAL - ACCOUNTS PAYABLE	194.29	
					FUND TOTAL	194.29	194.29
631 CLEARING FUND	2019	12	213	12/26/2019			
631-130000					DUE TO/FROM CLEARING	194.29	
635-111100					CASH		194.29
					FUND TOTAL	194.29	194.29

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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|apcshdsb

JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001 GENERAL FUND			194.29
631 CLEARING FUND		194.29	
	TOTAL	194.29	194.29

** END OF REPORT - Generated by Carrie L. Freitas **

ACCOUNTS PAYABLE REPORT TO CITY COUNCIL OF CASH DISBURSEMENTS

CHECK RUN: December 23, 2019 - January 13, 2020
 CITY COUNCIL: December 24, 2019 - January 14, 2020

Last check from previous run: 352474 dated 12/26/19 issued to H.D. Fowler Co for \$194.29.

Payment Type	Check Date	Check Number	Department/Vendor/Description	Amount
EFT	12/26/19	368	WA State DOR/Excise taxes - November 2019	19,607.11
ACH	12/26/19	369	COBI/Utility billing - December 2019	3,126.95
ACH	12/26/19	370	WA State DOL/Firearm dealer permits - December 2019	90.00
VOID	12/20/19	352476	PW/City of BI-Retainage/Check error	N/A
Manual	12/20/19	352475	CC/Agate Events/Catering: council holiday party	844.75
Manual	12/20/19	352476	PW/City of BI/Retainage: Buoy installation project	700.00
Manual	12/20/19	352477	PR/WA State DRS/LEOFF payment, overtime hours	221.12
Manual	12/20/19	352478	LEGAL/Thomas Alpaugh/Public defense services - December 2019	4,484.32
Manual	12/20/19	352479	PW/Norwest Marine/Buoy installation project	14,560.00
Manual	12/31/19	352480	PW/City of BI/Retainage: Buoy installation project check reprint	700.00
Manual	01/03/20	352481	POL/AT&T Mobility/Wireless charges	1,630.67
Manual	01/03/20	352482	POL/Taser International/Signal sidearm kits	7,056.66
Manual	01/03/20	352483	CenturyLink/Citywide telemetry & fax service - December 2019	2,927.49
Manual	01/03/20	352484	ENG/City of BI/Retainage: WWTP lift station improvements	2,446.59
Manual	01/03/20	352485	POL/City of Bremerton/Range rental	400.00
Manual	01/03/20	352486	POL/LN Curtis/Uniform supplies	185.52
Manual	01/03/20	352487	ENG/Gary Harper Construction/WWTP lift station improvements	50,888.99
Manual	01/03/20	352488	Puget Sound Energy/Green Power Contract - December 2019	849.33
Manual	01/03/20	352489	POL/Reliable Storage/Storage unit	320.00
Manual	01/03/20	352490	CRT/Rolling Bay Commercial Properties/Rent - January 2020	4,197.30
Manual	01/03/20	352491	PW/Toshiba/Copier lease	224.23
Manual	01/03/20	352492	WA Water Service/Decant facility water - December 2019	153.59

Total Manual Checks and Electronic Disbursements	115,614.62
---	-------------------

Regular Run	01/15/20	352493-352619		Total Regular Check Run	535,988.89
				Total Disbursements	651,603.51

Retainage Release	N/A	N/A			N/A
Travel Advance	N/A	N/A			N/A

Prepared and Reviewed by  Carrie Freitas, Senior Accounting Technician

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished,
 the services rendered, or the labor performed as described herein and that the claim
 is a just, due, and unpaid obligation against the City of Bainbridge Island,
 and that I am authorized to authenticate and certify to said claim.

 1-8-2020
 Karl R. Shaw, Accounting Manager Date

EFT-Excise Nov 19

(CF) 1/3/20

01/03/2020 09:56 |CITY OF BAINBRIDGE ISLAND
cfreitas |A/P CASH DISBURSEMENTS JOURNAL

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|apcsdshsb

CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

368	12/26/2019	MANL	124 WA ST DEPT OF REVENU	236954	NOV19	11/30/2019	EFTNOV19	19,607.11	
Invoice: NOV19						NOVEMBER 2019 EXCISE TAXES			
				82.13	91411341 553000	FINANCE - WATER EXTRNL TAXES			
				111.87	91421351 553000	FINANCE - SEWER - EXTRNL TAXES			
				5,446.23	91421351 553000	FINANCE - SEWER - EXTRNL TAXES			
				41.86	91421351 553000	FINANCE - SEWER - EXTRNL TAXES			
				15.13	91411341 553000	FINANCE - WATER EXTRNL TAXES			
				3.53	91411341 553000	FINANCE - WATER EXTRNL TAXES			
				2,646.76	91431383 553000	FINANCE - SSWM - EXTRNL TAXES			
				4,411.77	91411341 553000	FINANCE - WATER EXTRNL TAXES			
				651.36	91421351 553000	FINANCE - SEWER - EXTRNL TAXES			
				1.77	31011131 531100	EX-GF-SUPPLIES			
				10.63	53011212 53110000499	BVP-BULLETPROOF VESTS-PURCHASE			
				3.00	63470586 544000	CUR-DEV-ZONING-ADV			
				12.39	63470586 544000	CUR-DEV-ZONING-ADV			
				1.93	63470586 544000	CUR-DEV-ZONING-ADV			
				2.20	63470586 544000	CUR-DEV-ZONING-ADV			
				1.86	63470586 544000	CUR-DEV-ZONING-ADV			
				12.49	63470586 544000	CUR-DEV-ZONING-ADV			
				199.23	81011881 548500	IT - C/E COMPUTER SUPPORT			
				5,080.97	81011881 548500	IT - C/E COMPUTER SUPPORT			
				870.00	81011418 664000	IT - C/E MACHINERY & EQUIPMENT			
							CHECK	368 TOTAL:	19,607.11
					NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***	19,607.11	
						COUNT	AMOUNT		
						-----	-----		
TOTAL MANUAL CHECKS						1	19,607.11		
							*** GRAND TOTAL ***	19,607.11	

01/03/2020 09:56
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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

|P 2
|apcshdsb

JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC LINE DESC	T OB	DEBIT	CREDIT
2019	12	394									
APP	401-213000		12/26/2019	EFTNOV19	EXCISE			ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		4,512.56	
APP	635-111100		12/26/2019	EFTNOV19	EXCISE			CASH AP CASH DISBURSEMENTS JOURNAL			19,607.11
APP	402-213000		12/26/2019	EFTNOV19	EXCISE			ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		6,251.32	
APP	403-213000		12/26/2019	EFTNOV19	EXCISE			ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		2,646.76	
APP	001-213000		12/26/2019	EFTNOV19	EXCISE			GENERAL - ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		6,162.60	
APP	407-213000		12/26/2019	EFTNOV19	EXCISE			ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		33.87	

GENERAL LEDGER TOTAL										19,607.11	19,607.11
APP	631-130000		12/26/2019	EFTNOV19	EXCISE			DUE TO/FROM CLEARING		19,607.11	
APP	401-130000		12/26/2019	EFTNOV19	EXCISE			DUE TO/FROM CLEARING			4,512.56
APP	402-130000		12/26/2019	EFTNOV19	EXCISE			DUE TO/FROM CLEARING			6,251.32
APP	403-130000		12/26/2019	EFTNOV19	EXCISE			DUE TO/FROM CLEARING			2,646.76
APP	001-130000		12/26/2019	EFTNOV19	EXCISE			GENERAL - DUE TO/FROM CLEARING			6,162.60
APP	407-130000		12/26/2019	EFTNOV19	EXCISE			DUE TO/FROM CLEARING			33.87

SYSTEM GENERATED ENTRIES TOTAL										19,607.11	19,607.11

JOURNAL 2019/12/394 TOTAL										39,214.22	39,214.22

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	394	12/26/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		6,162.60
001-213000				GENERAL - ACCOUNTS PAYABLE	6,162.60	
				FUND TOTAL	6,162.60	6,162.60
401 WATER OPERATING FUND	2019 12	394	12/26/2019			
401-130000				DUE TO/FROM CLEARING		4,512.56
401-213000				ACCOUNTS PAYABLE	4,512.56	
				FUND TOTAL	4,512.56	4,512.56
402 SEWER OPERATING FUND	2019 12	394	12/26/2019			
402-130000				DUE TO/FROM CLEARING		6,251.32
402-213000				ACCOUNTS PAYABLE	6,251.32	
				FUND TOTAL	6,251.32	6,251.32
403 STORM & SURFACE WATER FUND	2019 12	394	12/26/2019			
403-130000				DUE TO/FROM CLEARING		2,646.76
403-213000				ACCOUNTS PAYABLE	2,646.76	
				FUND TOTAL	2,646.76	2,646.76
407 BUILDING & DEVELOPMENT FUND	2019 12	394	12/26/2019			
407-130000				DUE TO/FROM CLEARING		33.87
407-213000				ACCOUNTS PAYABLE	33.87	
				FUND TOTAL	33.87	33.87
631 CLEARING FUND	2019 12	394	12/26/2019			
631-130000				DUE TO/FROM CLEARING	19,607.11	
635-111100				CASH		19,607.11
				FUND TOTAL	19,607.11	19,607.11

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		6,162.60
401	WATER OPERATING FUND		4,512.56
402	SEWER OPERATING FUND		6,251.32
403	STORM & SURFACE WATER FUND		2,646.76
407	BUILDING & DEVELOPMENT FUND		33.87
631	CLEARING FUND	19,607.11	
	TOTAL	19,607.11	19,607.11

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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NUMBER OF CHECKS 1 *** CASH ACCOUNT TOTAL *** 3,126.95

	COUNT	AMOUNT
TOTAL MANUAL CHECKS	1	3,126.95

*** GRAND TOTAL *** 3,126.95

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

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YEAR PER	JNL	SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T OB	DEBIT	CREDIT
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC					
2019 12	395									
APP 001-213000					GENERAL - ACCOUNTS PAYABLE			2,249.23		
12/26/2019	ACHUBDEC	UB			AP CASH DISBURSEMENTS JOURNAL					
APP 635-111100					CASH					3,126.95
12/26/2019	ACHUBDEC	UB			AP CASH DISBURSEMENTS JOURNAL					
APP 402-213000					ACCOUNTS PAYABLE			394.70		
12/26/2019	ACHUBDEC	UB			AP CASH DISBURSEMENTS JOURNAL					
APP 101-213000					STREETS - ACCOUNTS PAYABLE			483.02		
12/26/2019	ACHUBDEC	UB			AP CASH DISBURSEMENTS JOURNAL					
							GENERAL LEDGER TOTAL		3,126.95	3,126.95
APP 631-130000					DUE TO/FROM CLEARING			3,126.95		
12/26/2019	ACHUBDEC	UB								
APP 001-130000					GENERAL - DUE TO/FROM CLEARING					2,249.23
12/26/2019	ACHUBDEC	UB								
APP 402-130000					DUE TO/FROM CLEARING					394.70
12/26/2019	ACHUBDEC	UB								
APP 101-130000					STREETS - DUE TO/FROM CLEARING					483.02
12/26/2019	ACHUBDEC	UB								
							SYSTEM GENERATED ENTRIES TOTAL		3,126.95	3,126.95
							JOURNAL 2019/12/395 TOTAL		6,253.90	6,253.90

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|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
ACCOUNT						
001 GENERAL FUND	2019 12	395	12/26/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		2,249.23
001-213000				GENERAL - ACCOUNTS PAYABLE	2,249.23	
				FUND TOTAL	2,249.23	2,249.23
101 STREET FUND	2019 12	395	12/26/2019			
101-130000				STREETS - DUE TO/FROM CLEARING		483.02
101-213000				STREETS - ACCOUNTS PAYABLE	483.02	
				FUND TOTAL	483.02	483.02
402 SEWER OPERATING FUND	2019 12	395	12/26/2019			
402-130000				DUE TO/FROM CLEARING		394.70
402-213000				ACCOUNTS PAYABLE	394.70	
				FUND TOTAL	394.70	394.70
631 CLEARING FUND	2019 12	395	12/26/2019			
631-130000				DUE TO/FROM CLEARING	3,126.95	
635-111100				CASH		3,126.95
				FUND TOTAL	3,126.95	3,126.95

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		2,249.23
101	STREET FUND		483.02
402	SEWER OPERATING FUND		394.70
631	CLEARING FUND	3,126.95	
	TOTAL	3,126.95	3,126.95

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CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					

370	12/26/2019	MANL	969 DEPARTMENT OF LICENS	237001	DEC19CPL	12/20/2019	ACHFA12	90.00
	Invoice: DEC19CPL					DEC 2019 FIREARMS		
				90.00	41654860 586000	GUN PERMIT OUT		
						CHECK	370 TOTAL:	90.00
				NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***		90.00
						COUNT	AMOUNT	
						-----	-----	
				TOTAL MANUAL CHECKS	1		90.00	
							*** GRAND TOTAL ***	90.00

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|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

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YEAR PER	JNL	SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC LINE DESC	T OB	DEBIT	CREDIT
2019 12	396	APP 650-213000	12/26/2019	ACHFA12	FA			ACCOUNTS PAYABLE AP CASH DISBURSEMENTS JOURNAL		90.00	
APP 635-111100		12/26/2019	ACHFA12	FA			CASH AP CASH DISBURSEMENTS JOURNAL				90.00
GENERAL LEDGER TOTAL										90.00	90.00
APP 631-130000		12/26/2019	ACHFA12	FA			DUE TO/FROM CLEARING			90.00	
APP 650-130000		12/26/2019	ACHFA12	FA			DUE TO/FROM CLEARING				90.00
SYSTEM GENERATED ENTRIES TOTAL										90.00	90.00
JOURNAL 2019/12/396 TOTAL										180.00	180.00

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
631 CLEARING FUND	2019 12	396	12/26/2019			
631-130000				DUE TO/FROM CLEARING	90.00	
635-111100				CASH		90.00
				FUND TOTAL	90.00	90.00
650 AGENCY FUND	2019 12	396	12/26/2019			
650-130000				DUE TO/FROM CLEARING		90.00
650-213000				ACCOUNTS PAYABLE	90.00	
				FUND TOTAL	90.00	90.00

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|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
631 CLEARING FUND		90.00	
650 AGENCY FUND			90.00
	TOTAL	90.00	90.00

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

VOID
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1-3-20

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CASH ACCOUNT: 635 111100 CASH
CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352476 12/20/2019 VOID 102 CITY OF BAINBRIDGE I 236971 RETREQ2-790 12/16/2019 21900070 -700.00
Invoice: RETREQ2-790 DAVE ULLIN OWM BUOY-RET

-700.00 73311475 66300000790 OWM-5 ADD'L BUOYS-CONSTR

CHECK 352476 TOTAL: -700.00

NUMBER OF CHECKS 1 *** CASH ACCOUNT TOTAL *** -700.00

COUNT AMOUNT

TOTAL VOIDED CHECKS 1 700.00

*** GRAND TOTAL *** -700.00

Due to Positive Pay not having been done, check was rejected by the bank. VOID in order to reissue check, using effective date of 12/31/19.

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|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL	SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T OB	DEBIT	CREDIT
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC					
2019 12	381									
APP 301-213000						ACCOUNTS PAYABLE				700.00
12/31/2019	352476	VOID			AP CASH DISBURSEMENTS JOURNAL					
APP 635-111100						CASH		700.00		
12/31/2019	352476	VOID			AP CASH DISBURSEMENTS JOURNAL					
							GENERAL LEDGER TOTAL		700.00	700.00
APP 631-130000						DUE TO/FROM CLEARING				700.00
12/31/2019	M122019	VOID								
APP 301-130000						DUE TO/FROM CLEARING		700.00		
12/31/2019	M122019	VOID								
							SYSTEM GENERATED ENTRIES TOTAL		700.00	700.00
							JOURNAL 2019/12/381	TOTAL	1,400.00	1,400.00

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
301 CAPITAL CONSTRUCTION FUND	2019 12	381	12/31/2019			
301-130000				DUE TO/FROM CLEARING	700.00	
301-213000				ACCOUNTS PAYABLE		700.00
				FUND TOTAL	700.00	700.00
631 CLEARING FUND	2019 12	381	12/31/2019			
631-130000				DUE TO/FROM CLEARING		700.00
635-111100				CASH	700.00	
				FUND TOTAL	700.00	700.00

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
301 CAPITAL CONSTRUCTION FUND			700.00
631 CLEARING FUND		700.00	
	TOTAL	700.00	700.00

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Manual
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CASH ACCOUNT: 635	111100	CASH	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
CHECK NO	CHK DATE	TYPE	VENDOR NAME					
INVOICE DTL DESC								
352475	12/20/2019	PRTD	9360 AGATE EVENTS	236967 184	12/19/2019		M122019	844.75
Invoice: 184					CC/CATERING: CC HOLIDAY PARTY			
				844.75 11011116 541100	COUNCIL - PROF SERVICES			
					CHECK	352475	TOTAL:	844.75
352476	12/20/2019	PRTD	102 CITY OF BAINBRIDGE I	236971 RETREQ2-790	12/16/2019	21900070	M122019	700.00
Invoice: RETREQ2-790					DAVE ULLIN OWM BUOY-RET			
				700.00 73311475 66300000790	OWM-5 ADD'L BUOYS-CONSTR			
					CHECK	352476	TOTAL:	700.00
352477	12/20/2019	PRTD	8743 WASHINGTON ST. DEPT.	236969 12/20/19	12/20/2019		M122019	221.12
Invoice: 12/20/19					PR/LEOFF PMT, OT HOURS			
				221.12 53011212 520000	POLICE - C/E PATROL BENEFITS			
					CHECK	352477	TOTAL:	221.12
352478	12/20/2019	PRTD	7849 LAW OFFICE OF THOMAS	236968 DEC19	12/12/2019		M122019	4,484.32
Invoice: DEC19					LEGAL/PUB DEF DEC 2019			
				4,484.32 32011281 541113	LGL-PUBLIC DEFENDER			
					CHECK	352478	TOTAL:	4,484.32
352479	12/20/2019	PRTD	5403 NORWEST MARINE, LLC	236970 PAYREQ2-790	12/16/2019	21900069	M122019	14,560.00
Invoice: PAYREQ2-790					DAVE ULLIN OWM BUOY INSTL			
				14,560.00 73311475 66300000790	OWM-5 ADD'L BUOYS-CONSTR			
					CHECK	352479	TOTAL:	14,560.00
					NUMBER OF CHECKS	5	*** CASH ACCOUNT TOTAL ***	20,810.19
					COUNT		AMOUNT	
					-----	-----	-----	
					TOTAL PRINTED CHECKS	5	20,810.19	
							*** GRAND TOTAL ***	20,810.19

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CITY OF BAINBRIDGE ISLAND
 A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

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YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
2019 12	247	-----							
APP 001-213000	12/20/2019	M122019	122019			GENERAL - ACCOUNTS PAYABLE		5,550.19	
						AP CASH DISBURSEMENTS JOURNAL			
APP 635-111100	12/20/2019	M122019	122019			CASH			20,810.19
						AP CASH DISBURSEMENTS JOURNAL			
APP 301-213000	12/20/2019	M122019	122019			ACCOUNTS PAYABLE		15,260.00	
						AP CASH DISBURSEMENTS JOURNAL			
							-----	-----	
GENERAL LEDGER TOTAL								20,810.19	20,810.19
APP 631-130000	12/20/2019	M122019	122019			DUE TO/FROM CLEARING		20,810.19	
APP 001-130000	12/20/2019	M122019	122019			GENERAL - DUE TO/FROM CLEARING			5,550.19
APP 301-130000	12/20/2019	M122019	122019			DUE TO/FROM CLEARING			15,260.00
							-----	-----	
SYSTEM GENERATED ENTRIES TOTAL								20,810.19	20,810.19
							-----	-----	
JOURNAL 2019/12/247 TOTAL								41,620.38	41,620.38

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A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2019 12	247	12/20/2019			
001-130000				GENERAL - DUE TO/FROM CLEARING		5,550.19
001-213000				GENERAL - ACCOUNTS PAYABLE	5,550.19	
				FUND TOTAL	5,550.19	5,550.19
301 CAPITAL CONSTRUCTION FUND	2019 12	247	12/20/2019			
301-130000				DUE TO/FROM CLEARING		15,260.00
301-213000				ACCOUNTS PAYABLE	15,260.00	
				FUND TOTAL	15,260.00	15,260.00
631 CLEARING FUND	2019 12	247	12/20/2019			
631-130000				DUE TO/FROM CLEARING	20,810.19	
635-111100				CASH		20,810.19
				FUND TOTAL	20,810.19	20,810.19

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		5,550.19
301	CAPITAL CONSTRUCTION FUND		15,260.00
631	CLEARING FUND	20,810.19	
	TOTAL	20,810.19	20,810.19

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

 352480 12/31/2019 PRD 102 CITY OF BAINBRIDGE I 236971 RETREQ2-790 12/16/2019 21900070 M122019 700.00
 Invoice: RETREQ2-790 DAVE ULLIN OWM BUOY-RET
 700.00 73311475 66300000790 OWM-5 ADD'L BUOYS-CONSTR

CHECK 352480 TOTAL: 700.00

NUMBER OF CHECKS 1 *** CASH ACCOUNT TOTAL *** 700.00

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	1	700.00

*** GRAND TOTAL *** 700.00

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CITY OF BAINBRIDGE ISLAND
 A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

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YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	REF 1	REF 2	REF 3	LINE DESC				
2019 12	382								
APP 301-213000					ACCOUNTS PAYABLE		700.00		
	12/31/2019	M122019	REPRNT		AP CASH DISBURSEMENTS JOURNAL				
APP 635-111100					CASH			700.00	
	12/31/2019	M122019	REPRNT		AP CASH DISBURSEMENTS JOURNAL				
GENERAL LEDGER TOTAL							700.00	700.00	
APP 631-130000					DUE TO/FROM CLEARING		700.00		
	12/31/2019	M122019	REPRNT						
APP 301-130000					DUE TO/FROM CLEARING			700.00	
	12/31/2019	M122019	REPRNT						
SYSTEM GENERATED ENTRIES TOTAL							700.00	700.00	
JOURNAL 2019/12/382 TOTAL							1,400.00	1,400.00	

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
301 CAPITAL CONSTRUCTION FUND	2019 12	382	12/31/2019			
301-130000				DUE TO/FROM CLEARING		700.00
301-213000				ACCOUNTS PAYABLE	700.00	
				FUND TOTAL	700.00	700.00
631 CLEARING FUND	2019 12	382	12/31/2019			
631-130000				DUE TO/FROM CLEARING	700.00	
635-111100				CASH		700.00
				FUND TOTAL	700.00	700.00

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
301 CAPITAL CONSTRUCTION FUND			700.00
631 CLEARING FUND		700.00	
	TOTAL	700.00	700.00

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC									
352481	01/03/2020	PRTD	6420 AT&T MOBILITY	236977	287287004732X122019	12/11/2019		01/12/20	1,630.67
			Invoice: 287287004732X122019						
				1,630.67	91011215 542100				
								POL/WIRELESS CHARGES	
								GG-C/E-PD-PHONE	
								CHECK 352481 TOTAL:	1,630.67
352482	01/03/2020	PRTD	4861 TASER INTERNATIONAL	236978	SI-1629167	12/14/2019		01/12/20	7,056.66
			Invoice: SI-1629167						
				7,056.66	53011212 531100				
								POL/SIGNAL SIDEARM KITS X26	
								PD-C/E-PATROL SUPPLIES	
								CHECK 352482 TOTAL:	7,056.66
352483	01/03/2020	PRTD	551 CENTURYLINK	236979	0399DEC19	12/23/2019		01/12/20	2,869.17
			Invoice: 0399DEC19						
				1,551.09	91425358 542100				
				756.49	91411891 542100				
				72.71	91011755 542100				
				147.07	91011189 542100				
				215.97	91011897 542100				
				70.38	91011255 542100				
				55.46	91011215 542100				
								CITYWIDE TELEMETRY & FAX SVC	
								GG-WWTP-TELEPHONE/FAX	
								GG-WTR-FAC-PHONE	
								GG-C/E-COMMONS-PHONE	
								GG-C/E-CITY HALL-PHONE	
								GG-C/E-O&M YARD FAC-PHONE	
								GG-C/E-COURT BLDG-PHONE	
								GG-C/E-PD-PHONE	
				236980	6124DEC19	12/16/2019		01/12/20	58.32
			Invoice: 6124DEC19						
				58.32	91411891 542100				
								WEAVER PRV WATER TELEM	
								GG-WTR-FAC-PHONE	
								CHECK 352483 TOTAL:	2,927.49
352484	01/03/2020	PRTD	102 CITY OF BAINBRIDGE I	236984	RETREQ5-921	12/04/2019	21900008	01/12/20	294.21
			Invoice: RETREQ5-921						
				294.21	72423434 66300000921				
								RET - OLD TMT PLANT PUMP STAT.	
								OLD WWTP LIFT STA IMPR-CONSTR	
				236985	RETREQFINAL-921	12/04/2019	21900008	01/12/20	2,152.38
			Invoice: RETREQFINAL-921						
				2,152.38	72423434 66300000921				
								RET - OLD TMT PLANT PUMP STAT.	
								OLD WWTP LIFT STA IMPR-CONSTR	
								CHECK 352484 TOTAL:	2,446.59
352485	01/03/2020	PRTD	104 CITY OF BREMERTON	236986	BPD0002521	12/17/2019		01/12/20	400.00
			Invoice: BPD0002521						
				400.00	53011212 545000				
								POL/RANGE RENTAL X2	
								POLICE - C/E PATROL RENTS	
								CHECK 352485 TOTAL:	400.00
352486	01/03/2020	PRTD	6363 LN CURTIS & SONS	236987	INV344197	12/13/2019		01/12/20	90.47
			Invoice: INV344197						
				90.47	53011212 520000				
								POL/POUCHES: SHIELDS	
								POLICE - C/E PATROL BENEFITS	

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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CHECK 352492 TOTAL: 153.59

NUMBER OF CHECKS 12 *** CASH ACCOUNT TOTAL *** 71,280.37

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	12	71,280.37

*** GRAND TOTAL *** 71,280.37

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL					ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
2020 1	41								
APP 001-213000	01/03/2020	01/12/20	010320			GENERAL - ACCOUNTS PAYABLE		15,201.07	
						AP CASH DISBURSEMENTS JOURNAL			
APP 635-111100	01/03/2020	01/12/20	010320			CASH			71,280.37
						AP CASH DISBURSEMENTS JOURNAL			
APP 402-213000	01/03/2020	01/12/20	010320			ACCOUNTS PAYABLE		54,886.67	
						AP CASH DISBURSEMENTS JOURNAL			
APP 401-213000	01/03/2020	01/12/20	010320			ACCOUNTS PAYABLE		814.81	
						AP CASH DISBURSEMENTS JOURNAL			
APP 631-213000	01/03/2020	01/12/20	010320			ACCOUNTS PAYABLE		224.23	
						AP CASH DISBURSEMENTS JOURNAL			
APP 403-213000	01/03/2020	01/12/20	010320			ACCOUNTS PAYABLE		153.59	
						AP CASH DISBURSEMENTS JOURNAL			
						GENERAL LEDGER TOTAL		71,280.37	71,280.37
APP 631-130000	01/03/2020	01/12/20	010320			DUE TO/FROM CLEARING		71,056.14	
APP 001-130000	01/03/2020	01/12/20	010320			GENERAL - DUE TO/FROM CLEARING			15,201.07
APP 402-130000	01/03/2020	01/12/20	010320			DUE TO/FROM CLEARING			54,886.67
APP 401-130000	01/03/2020	01/12/20	010320			DUE TO/FROM CLEARING			814.81
APP 403-130000	01/03/2020	01/12/20	010320			DUE TO/FROM CLEARING			153.59
						SYSTEM GENERATED ENTRIES TOTAL		71,056.14	71,056.14
						JOURNAL 2020/01/41 TOTAL		142,336.51	142,336.51

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
001 GENERAL FUND	2020	1	41	01/03/2020			
001-130000					GENERAL - DUE TO/FROM CLEARING		15,201.07
001-213000					GENERAL - ACCOUNTS PAYABLE	15,201.07	
					FUND TOTAL	15,201.07	15,201.07
401 WATER OPERATING FUND	2020	1	41	01/03/2020			
401-130000					DUE TO/FROM CLEARING		814.81
401-213000					ACCOUNTS PAYABLE	814.81	
					FUND TOTAL	814.81	814.81
402 SEWER OPERATING FUND	2020	1	41	01/03/2020			
402-130000					DUE TO/FROM CLEARING		54,886.67
402-213000					ACCOUNTS PAYABLE	54,886.67	
					FUND TOTAL	54,886.67	54,886.67
403 STORM & SURFACE WATER FUND	2020	1	41	01/03/2020			
403-130000					DUE TO/FROM CLEARING		153.59
403-213000					ACCOUNTS PAYABLE	153.59	
					FUND TOTAL	153.59	153.59
631 CLEARING FUND	2020	1	41	01/03/2020			
631-130000					DUE TO/FROM CLEARING	71,056.14	
631-213000					ACCOUNTS PAYABLE	224.23	
635-111100					CASH		71,280.37
					FUND TOTAL	71,280.37	71,280.37

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		15,201.07
401	WATER OPERATING FUND		814.81
402	SEWER OPERATING FUND		54,886.67
403	STORM & SURFACE WATER FUND		153.59
631	CLEARING FUND	71,056.14	
	TOTAL	71,056.14	71,056.14

** END OF REPORT - Generated by Carrie L. Freitas **

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
						INVOICE DTL DESC			
Invoice: BAIN1912983									
				143.00	43411341 541100				
				143.00	43421351 541100				
				237225	111077	09/17/2019		01/12/20	8.67
Invoice: 111077									
				1.58	43411341 541100				
				1.59	43421351 541100				
				2.75	91411891 542500				
				2.75	91421891 542500				
				237226	111297	09/26/2019		01/12/20	71.38
Invoice: 111297									
				10.19	43411341 541100				
				10.19	43421351 541100				
				25.50	91411891 542500				
				25.50	91421891 542500				
						CHECK	352499	TOTAL:	825.65
352500	01/15/2020	PRTD	762 ASSOCIATION OF WASHI	237191	78674	11/23/2019		01/12/20	1,190.00
Invoice: 78674									
				1,190.00	91011586 541100				
				237192	78586	11/23/2019		01/12/20	18,140.00
Invoice: 78586									
				18,140.00	91011199 549100				
						CHECK	352500	TOTAL:	19,330.00
352501	01/15/2020	PRTD	4861 TASER INTERNATIONAL	237193	SI-1630218	12/18/2019		01/12/20	42,183.00
Invoice: SI-1630218									
				42,183.00	53011212 53510000956				
				237194	SI-1630205	12/18/2019		01/12/20	2,384.92
Invoice: SI-1630205									
				1,621.92	53011212 54850000956				
				763.00	53011212 53510000956				
						CHECK	352501	TOTAL:	44,567.92
352502	01/15/2020	PRTD	8891 BAINBRIDGE ISLAND YO	237221	Q4, 2019	11/01/2019		01/12/20	1,450.00
Invoice: Q4, 2019									
				1,450.00	31011732 54110000297				
						CHECK	352502	TOTAL:	1,450.00

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET

352503	01/15/2020	PRTD	9365 BAILEY MANOR INC	237035	12/21/19	12/21/2019		01/12/20	150.00
	Invoice: 12/21/19					DAMAGE DEPOSIT REFUND			
				150.00	41625860 586000	SC/COMMONS ROOM DEP-DISBURSEME			
						CHECK	352503	TOTAL:	150.00
352504	01/15/2020	PRTD	47 BAINBRIDGE DISPOSAL	237036	0000932390	12/31/2019		01/12/20	1,318.52
	Invoice: 0000932390					CITYWIDE DISP SVCS DEC 2019			
				140.98	91011215 547900	GG-C/E-PD-GARBAGE			
				435.42	91011768 547900	GG-C/E-PARKS-GARBAGE			
				507.53	91425358 547900	GG-WWTP-GARBAGE (NOT BIOSOLIDS)			
				215.11	91011897 547900	GG-C/E-O&M YARD FAC-GARBAGE			
				9.74	91111427 547900	GG-STREET-ROADSIDE-GARBAGE			
				9.74	91111427 547900	GG-STREET-ROADSIDE-GARBAGE			
				237037	0000932644	12/31/2019		01/12/20	76.72
	Invoice: 0000932644					BIG BELLY DISP SVCS DEC 2019			
				76.72	91011189 547903	BIG BELLY SOLAR GARBAGE CANS			
				237038	0000932586	12/31/2019		01/12/20	342.01
	Invoice: 0000932586					CH DISP SVCS DEC 2019			
				342.01	91011189 547900	GG-C/E-CITY HALL-GARBAGE			
						CHECK	352504	TOTAL:	1,737.25
352505	01/15/2020	PRTD	4638 BAINBRIDGE PERFORMIN	237073	1336	12/15/2019		01/12/20	7,500.00
	Invoice: 1336					CULTURAL FUNDING - OPERATING S			
				7,500.00	31011732 54110000297	EX-GF-CULTURAL ARTS & SCIENCES			
						CHECK	352505	TOTAL:	7,500.00
352506	01/15/2020	PRTD	55 SOUND PUBLISHING, IN	237039	BIR884927	12/20/2019		01/12/20	80.28
	Invoice: BIR884927					PCD/ORD 2020-02			
				80.28	63470586 544000	CUR-DEV-ZONING-ADV			
						CHECK	352506	TOTAL:	80.28
352507	01/15/2020	PRTD	8939 BATTLE POINT ASTRONO	237074	8	12/29/2019		01/12/20	3,362.46
	Invoice: 8					CULTURAL FUNDING: ARTISAN ASTR			
				3,362.46	31011732 54110000297	EX-GF-CULTURAL ARTS & SCIENCES			
						CHECK	352507	TOTAL:	3,362.46
352508	01/15/2020	PRTD	5412 BENEFIT ADMINISTRATI	237075	1912513	12/20/2019		01/12/20	253.00
	Invoice: 1912513					HSA/HSA CARD SVCS DEC 2019			
				27.83	21011125 520000	COURT - BENEFITS			

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
				45.54	31011131 520000				
				35.42	41011141 520000				
				22.77	51011211 520000				
				35.42	61011581 520000				
				80.96	71011321 520000				
				5.06	81011881 520000				
								CHECK 352508 TOTAL:	253.00
352509	01/15/2020	PRTD	45 BAINBRIDGE ISLAND CH	237195	9732	12/17/2019		01/12/20	220.00
			Invoice: 9732						
				220.00	31011131 549100				
								CHECK 352509 TOTAL:	220.00
352510	01/15/2020	PRTD	971 BAINBRIDGE ISLAND HI	237077	934	12/11/2019		01/12/20	3,750.00
			Invoice: 934						
				3,750.00	31011732 54110000297				
								CHECK 352510 TOTAL:	3,750.00
352511	01/15/2020	PRTD	7183 BI SPECIAL NEEDS FOU	237209	2542	12/31/2019		01/12/20	3,500.00
			Invoice: 2542						
				3,500.00	31017686 54110000297				
								CHECK 352511 TOTAL:	3,500.00
352512	01/15/2020	PRTD	4751 BLUEBEAM, INC	237078	1273885	01/03/2020		01/12/20	2,923.38
			Invoice: 1273885						
				2,923.38	81011881 548500				
								CHECK 352512 TOTAL:	2,923.38
352513	01/15/2020	PRTD	9363 ROBERT & JULIE BRESH	237040	PLN51449 VAR	12/23/2019		01/12/20	3,434.00
			Invoice: PLN51449 VAR						
				3,434.00	47047 345810				
								CHECK 352513 TOTAL:	3,434.00
352514	01/15/2020	PRTD	8595 BRUCE TITUS FORD, IN	237041	67092892	12/16/2019		01/12/20	191.61
			Invoice: 67092892						
				191.61	53011212 548100				
								CHECK 352514 TOTAL:	191.61

CASH ACCOUNT: 635 111100 CASH

CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352515 01/15/2020 PRD 9368 CARLE, CHRIS 236999 83133 01/02/2020 01/12/20 121.56
 Invoice: 83133
 121.56 411 122100 UB 11617 591 WOOD AVENUE SW
 WATER ACCOUNTS RECEIVABLE
 CHECK 352515 TOTAL: 121.56

352516 01/15/2020 PRD 853 KATHRYN M CARRUTHERS 237196 01/03/20 01/03/2020 01/12/20 120.00
 Invoice: 01/03/20
 120.00 21011125 541210 CRT/2 RHS PRO TEMP
 COURT - JUDGE PRO TEMPORE SVCS
 CHECK 352516 TOTAL: 120.00

352517 01/15/2020 PRD 4821 CASCADIA CONSULTING 237112 6948 12/20/2019 01/12/20 16,483.25
 Invoice: 6948
 16,483.25 31011391 541100 GREENHOUSE GAS EMISSIONS INVEN
 EXEC-GF-OTHER ENV SVCS
 CHECK 352517 TOTAL: 16,483.25

352518 01/15/2020 PRD 9294 VICTORIA BRAZITIS 237151 1010 01/01/2020 01/12/20 467.92
 Invoice: 1010
 467.92 31011131 541100 EX/PROF SVCS DEC 2019
 EX-GF-PROF SERVICES
 CHECK 352518 TOTAL: 467.92

352519 01/15/2020 PRD 460 CITY OF BI - PETTY C 237217 12/31/19 12/31/2019 01/12/20 69.28
 Invoice: 12/31/19
 7.16 72637319 53110000809 WATER QUAL FLOW MONIT-SUPPLIES
 3.05 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 19.53 41011141 531100 FIN - C/E ADMIN SUPPLIES
 2.36 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .90 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .20 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 11.55 36011143 443410 CLERK-GF-TRAINING
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 8.99 91011183 531100 GG-C/E-CH CLEANING-SUPPLIES
 1.83 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .61 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 .55 91011189 542500 GG-C/E-CITY HALL-POSTAGE
 9.50 01136 369810 CASHIER'S OVERAGES & SHORTAGES
 CHECK 352519 TOTAL: 69.28

01/08/2020 09:51 |CITY OF BAINBRIDGE ISLAND
 cfreitas |A/P CASH DISBURSEMENTS JOURNAL

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CASH ACCOUNT: 635 111100 CASH

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET

352520	01/15/2020	PRTD	460 CITY OF BAINBRIDGE I	237042	POL-2019-12	12/31/2019		01/12/20	13.59
			Invoice: POL-2019-12						
						POL/PETTY CASH REIMB DEC 19			
						6.85	91011215	542500	GG-C/E-PD-POSTAGE
						6.74	51011217	531100	PD-C/E-PARKING ENF-SUPPLIES
								CHECK	352520 TOTAL: 13.59
352521	01/15/2020	PRTD	102 CITY OF BAINBRIDGE I	237044	RETREQ4-851	12/19/2019	21900060	01/12/20	1,137.44
			Invoice: RETREQ4-851						
						2019 ANNUAL DRNG PRJ-RET			
						1,137.44	72431835	54810000851	2019 DRAINAGE/CULVERT R&M
								CHECK	352521 TOTAL: 1,137.44
352522	01/15/2020	PRTD	102 CITY OF BAINBRIDGE I	237047	RETREQ3-851	12/31/2019	21900060	01/12/20	596.34
			Invoice: RETREQ3-851						
						2019 ANNUAL DRNG PRJ-RET			
						596.34	72431835	54810000851	2019 DRAINAGE/CULVERT R&M
								CHECK	352522 TOTAL: 596.34
352523	01/15/2020	PRTD	102 CITY OF BAINBRIDGE I	237081	RETREQFINAL-1039	12/19/2019	21900073	01/12/20	4,431.81
			Invoice: RETREQFINAL-1039						
						SIDEWALK REPAIRS (RET)			
						4,431.81	73111261	54810001039	SIDEWALK ASSESS & RPR-REPAIRS
								CHECK	352523 TOTAL: 4,431.81
352524	01/15/2020	PRTD	9372 CLASH CREATIVE	237220	604438881	01/07/2019		01/12/20	65.00
			Invoice: 604438881						
						REFUND BL FEE			
						65.00	01132	321900	C/E BL INITIAL & RENEWAL
								CHECK	352524 TOTAL: 65.00
352525	01/15/2020	PRTD	8435 COATES DESIGN INC	237113	124211	12/20/2019		01/12/20	58,743.44
			Invoice: 124211						
						DESIGN SERVICES-POLICE & COURT			
						58,743.44	72311942	64110000724	PD/COURT BLDG-PROF SVCS/DESIGN
								CHECK	352525 TOTAL: 58,743.44
352526	01/15/2020	PRTD	8111 COMMUNITY SOLAR SOLU	237152	DEC19	01/02/2020		01/12/20	121.35
			Invoice: DEC19						
						DEC19 SOLAR NET METERING			
						121.35	91011189	54500000627	CH SOLAR-NET METERING PYMTS
								CHECK	352526 TOTAL: 121.35

CASH ACCOUNT: 635	111100	CASH								
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
						INVOICE DTL DESC				
352527	01/15/2020	PRTD	8564 WILLIAM E COOPER	237048	7-2019	12/31/2019		01/12/20	804.00	
			Invoice: 7-2019			LEOFF1 REIMB JUL-DEC 2019				
				804.00	91029211 521500	POLICE - INS ADD MEDICAL COSTS				
								CHECK	352527 TOTAL:	804.00
352528	01/15/2020	PRTD	142 COPIERS NORTHWEST IN	237049	INV2073051	12/24/2019		01/12/20	676.55	
			Invoice: INV2073051			EX,FIN/COPIER OVERAGE				
				338.28	31011131 545000	EX-GF-RENTS & LEASES				
				338.27	41011141 545000	FIN - C/E ADMIN RENTS & LEASES				
								CHECK	352528 TOTAL:	676.55
352529	01/15/2020	PRTD	7965 SHH	237051	16257	12/19/2019		01/12/20	325.17	
			Invoice: 16257			CRT/DRUG TESTS				
				325.17	21011125 531100	COURT - SUPPLIES				
				237153	16267	12/20/2019		01/12/20	325.17	
			Invoice: 16267			CRT/DRUG TEST KITS				
				325.17	21011125 531100	COURT - SUPPLIES				
								CHECK	352529 TOTAL:	650.34
352530	01/15/2020	PRTD	9370 CRIME STOPPERS OF PU	237197	CSOPS209	12/18/2019		01/12/20	1,354.00	
			Invoice: CSOPS209			POL/PROGRAM SUPPORT				
				1,354.00	53011212 541100	POLICE - C/E PATROL PROF SVCS				
								CHECK	352530 TOTAL:	1,354.00
352531	01/15/2020	PRTD	6854 CUES, INC.	237052	550854	12/20/2019		01/12/20	619.69	
			Invoice: 550854			PW/SEWER MX				
				619.69	73421355 548100	WIN COLL-R&M				
								CHECK	352531 TOTAL:	619.69
352532	01/15/2020	PRTD	7016 CUSTOM PRINTING	237056	9043	11/27/2019		01/12/20	330.85	
			Invoice: 9043			FIN/WINDOW ENVELOPES				
				165.42	43411341 531100	FIN-WTR-OFFICE SUPPLIES				
				165.43	43421351 531100	FIN-SWR-OFFICE SUPPLIES				
				237114	9039	11/27/2019		01/12/20	111.18	
			Invoice: 9039			ENG/BUS CARDS: CORELIS				
				111.18	72111431 531100	ENG - ACCESS MGMT SUPPLIES				

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC									
									CHECK 352532 TOTAL: 442.03
352533	01/15/2020	PRTD	9354 DPE SYSTEMS, INC	237057	MHD-3944	12/31/2019		01/12/20	449.29
			Invoice: MHD-3944						
				449.29	81011881 548100	IT - C/E REPAIRS & MAINTENANCE			
				237058	MHD-3910	12/24/2019		01/12/20	86.96
			Invoice: MHD-3910						
				86.96	81011881 548100	IT - C/E REPAIRS & MAINTENANCE			
				237059	47171	12/19/2019		01/12/20	4,245.56
			Invoice: 47171						
				4,245.56	81011881 548100	IT - C/E REPAIRS & MAINTENANCE			
									CHECK 352533 TOTAL: 4,781.81
352534	01/15/2020	PRTD	672 DSC INC	237060	99767	12/19/2019		01/12/20	190.64
			Invoice: 99767						
				143.88	73111256 53110000999	2019 STORM PREP-STRT-SUPPLIES			
				46.76	73411345 531100	OFFICE SUPPLIES			
									CHECK 352534 TOTAL: 190.64
352535	01/15/2020	PRTD	7144 DTMICRO, INC	237082	4739	12/15/2019		01/12/20	136.25
			Invoice: 4739						
				136.25	91011215 542100	GG-C/E-PD-PHONE			
									CHECK 352535 TOTAL: 136.25
352536	01/15/2020	PRTD	9148 DUENDE PRESS	237062	616	12/30/2019		01/12/20	2,150.00
			Invoice: 616						
				2,150.00	31011572 54110001015	NEWSLETTER-PROF SVCS			
									CHECK 352536 TOTAL: 2,150.00
352537	01/15/2020	PRTD	8582 ENVISIO SOLUTIONS, I	237198	130812	12/15/2019		01/12/20	5,556.60
			Invoice: 130812						
				5,556.60	81011881 548500	IT - C/E COMPUTER SUPPORT			
									CHECK 352537 TOTAL: 5,556.60
352538	01/15/2020	PRTD	1953 FERGUSON ENTERPRISES	237065	0838313-1	12/19/2019		01/12/20	545.82
			Invoice: 0838313-1						
				545.82	73411345 531100	OFFICE SUPPLIES			
				237066	0838884	12/19/2019		01/12/20	53.65

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
						INVOICE DTL DESC				
Invoice: 0838884										
				53.65	73411345 531100					
						PW/WELL SITE MX SUPPLIES				
						OFFICE SUPPLIES				
				237067	0838313	12/16/2019		01/12/20	271.21	
Invoice: 0838313										
				271.21	73411345 531100					
						PW/WELL SITE MX SUPPLIES				
						OFFICE SUPPLIES				
				237068	SC44137	11/30/2019		01/12/20	3.23	
Invoice: SC44137										
				3.23	73411345 549900					
						PW/SVC CHARGE				
						O&M-WTR MAINT-MISC				
								CHECK	352538 TOTAL:	873.91
352539	01/15/2020	PRTD	8292 PRJ GROUP INC	237069	22486	12/27/2019		01/12/20	533.28	
Invoice: 22486										
				533.28	73637941 548100					
						PW/VACTOR REPAIR				
						VACTOR R&M-REPAIRS				
								CHECK	352539 TOTAL:	533.28
352540	01/15/2020	PRTD	6940 FREMONT ANALYTICAL	237116	1912163	12/24/2019	21900003	01/12/20	3,278.76	
Invoice: 1912163										
				3,278.76	72637319 54110000809					
						WATER QUAL FLOW MONIT-PR SVC				
						WATER QUAL FLOW MONIT-PRO SVCS				
								CHECK	352540 TOTAL:	3,278.76
352541	01/15/2020	PRTD	5062 FRIENDS OF THE FARMS	237070	Q4 2019	01/02/2020		01/12/20	16,250.00	
Invoice: Q4 2019										
				16,250.00	31011131 54110001019					
						EX/Q4 PROF SVCS				
						FOTF-FARM MNGT SVCS				
								CHECK	352541 TOTAL:	16,250.00
352542	01/15/2020	PRTD	513 GRAINGER	237071	9396040645	12/27/2019		01/12/20	134.39	
Invoice: 9396040645										
				134.39	73638935 531100					
						PW/SHOP SUPPLIES				
						O&M-STD ALLOCATION-SUPPLIES				
								CHECK	352542 TOTAL:	134.39
352543	01/15/2020	PRTD	6359 GRAVITEC SYSTEMS INC	237154	16644	10/31/2019		01/12/20	3,875.00	
Invoice: 16644										
				3,875.00	73011183 54810000912					
						CITY HALL FALL PROTECTION SYS				
						FAC ROOF FALL PROTECTION-R&M				
								CHECK	352543 TOTAL:	3,875.00
352544	01/15/2020	PRTD	2096 GRAY & OSBORNE INC	237118	2019-1	12/10/2019	21700158	01/12/20	184.35	
Invoice: 2019-1										
				184.35	72413434 64110000819					
						WATER SYSTEM DESIGN IMPRVMENTS				
						WATER IMPR PROJECTS 2017-ENG				

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CASH ACCOUNT: 635 111100 CASH

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								CHECK 352544 TOTAL:	184.35
352545	01/15/2020	PRTD	252 H.D. FOWLER COMPANY	237084	I5357156	12/17/2019		01/12/20	309.67
			Invoice: I5357156						
				309.67	73411345 531100				
				237085	I5359414	12/19/2019		01/12/20	68.24
			Invoice: I5359414						
				68.24	73411345 531100				
								CHECK 352545 TOTAL:	377.91
352546	01/15/2020	PRTD	9038 HEDEEN & CADITZ, PLL	237212	9002	01/03/2020		01/12/20	600.00
			Invoice: 9002						
				600.00	32011262 54111000668				
								CHECK 352546 TOTAL:	600.00
352547	01/15/2020	PRTD	9364 RONALD & KATHRYN HOP	237087	PLN51184 SSDP	12/16/2019		01/12/20	2,290.00
			Invoice: PLN51184 SSDP						
				2,290.00	47047 345890				
								CHECK 352547 TOTAL:	2,290.00
352548	01/15/2020	PRTD	9333 INNOVATIVE DATA AQUI	237089	19236	12/26/2019		01/12/20	7,580.00
			Invoice: 19236						
				7,580.00	72111444 541100				
								CHECK 352548 TOTAL:	7,580.00
352549	01/15/2020	PRTD	8027 INFORMATION STATION	237090	1171910-B	12/17/2019		01/12/20	350.00
			Invoice: 1171910-B						
				350.00	31011256 54500000830				
								CHECK 352549 TOTAL:	350.00
352550	01/15/2020	PRTD	4109 KITSAP COUNTY AUDITO	237091	12/24/19	12/24/2019		01/12/20	16,380.27
			Invoice: 12/24/19						
				16,380.27	91011117 551000				
								CHECK 352550 TOTAL:	16,380.27

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CASH ACCOUNT: 635 111100 CASH

CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352564 01/15/2020 PRD 7038 MOON SECURITY SERVIC 237108 1013650 12/31/2019 01/12/20 1,322.00
 Invoice: 1013650
 1,322.00 21011232 545000 CRT/HOUSE ARREST SVCS DEC 19
 COURT-ELECT HOME DET'N-EQ RENT
 CHECK 352564 TOTAL: 1,322.00

352565 01/15/2020 PRD 1441 MEMBERSHIP LOCKBOX 4 237155 157844 12/10/2019 01/12/20 1,953.00
 Invoice: 157844
 1,953.00 31011131 549100 EX/NLC DUES: 3/2020-2/2021
 EX-GF-DUES/SUBCR/MEMBERSH
 CHECK 352565 TOTAL: 1,953.00

352566 01/15/2020 PRD 8581 NEOGOV 237218 INV-11936 11/19/2019 01/12/20 7,391.81
 Invoice: INV-11936
 7,391.81 81011881 548500 IT/PERFORM SUBX 19-20
 IT - C/E COMPUTER SUPPORT
 CHECK 352566 TOTAL: 7,391.81

352567 01/15/2020 PRD 2430 OGDEN MURPHY WALLACE 237109 832070 12/17/2019 01/12/20 11,450.42
 Invoice: 832070
 1,195.22 32470152 54111100844 LEGAL/PROF SVCS NOV 2019
 819.00 32470152 54111100893 LIT-CLARK ADMIN APPEAL
 5,827.00 32011152 54111101021 LIT-CAINION APA SUP CT
 850.50 32011152 54111101047 DUNN PRR CLAIM
 787.50 32011152 54111001020 LIT-SCHULZE PRA SUIT
 985.50 32011152 54111001048 SMALL CELL WIRELESS ORD
 922.70 32011152 541110 LGL-KPUD FRANCHISE
 63.00 91011211 541110 LGL-GF-LEGAL ADVICE
 GG-C/E-CIVIL SVC-LEGAL ADVICE
 CHECK 352567 TOTAL: 11,450.42

352568 01/15/2020 PRD 7925 OMNIPARK, INC 237199 121041 01/01/2020 01/12/20 379.32
 Invoice: 121041
 379.32 51011217 548500 POL/PARKING SYST SUPPORT
 PD-C/E-PARKING ENF-COMP SUPPOR
 CHECK 352568 TOTAL: 379.32

352569 01/15/2020 PRD 8164 OPENGOV, INC 237211 INV-001190 01/03/2020 01/12/20 6,500.00
 Invoice: INV-001190
 6,500.00 81011881 548500 IT/2020 REPORTING
 IT - C/E COMPUTER SUPPORT
 CHECK 352569 TOTAL: 6,500.00

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CASH ACCOUNT: 635	111100	CASH							
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET

352570	01/15/2020	PRTD	8286 SUPERINTENDENT OF P	237110	15766	12/13/2019		01/12/20	135.75
			Invoice: 15766						
				135.75	65438	386110			
				237111	15802	12/24/2019		01/12/20	90.50
			Invoice: 15802						
				90.50	65438	386110			
CHECK 352570 TOTAL:									226.25
352571	01/15/2020	PRTD	1754 OTIS ELEVATOR COMPAN	237200	ST05151G120	12/20/2019		01/12/20	2,299.41
			Invoice: ST05151G120						
				2,299.41	73011183	548100			
CHECK 352571 TOTAL:									2,299.41
352572	01/15/2020	PRTD	1808 PACIFIC COAST CONGRE	237201	2012578	12/01/2019		01/12/20	265.00
			Invoice: 2012578						
				265.00	55011757	549100			
CHECK 352572 TOTAL:									265.00
352573	01/15/2020	PRTD	9156 PEACOCK FAMILY SERVI	237222	4	01/06/2020		01/12/20	2,125.00
			Invoice: 4						
				2,125.00	31017540	54110000297			
CHECK 352573 TOTAL:									2,125.00
352574	01/15/2020	PRTD	458 PENINSULA FIRE INC	237121	12162019TM3	12/16/2019		01/12/20	217.73
			Invoice: 12162019TM3						
				217.73	73011897	531100			
CHECK 352574 TOTAL:									217.73
352575	01/15/2020	PRTD	7803 PINTO, MICHELLE	237122	381	01/02/2020		01/12/20	231.00
			Invoice: 381						
				231.00	21011125	541230			
CHECK 352575 TOTAL:									231.00
352576	01/15/2020	PRTD	8229 PIPER THORNBURGH	237124	12/30/19	12/30/2019		01/12/20	150.00
			Invoice: 12/30/19						
				150.00	21011125	541210			

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CASH ACCOUNT: 635 111100 CASH

CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

CHECK 352576 TOTAL: 150.00

352577 01/15/2020 PRD 8922 REXEL USA INC. 237123 SC30607 12/25/2019 01/12/20 7.31
 Invoice: SC30607 PW/FINANCE CHARGE

7.31 73011183 549100 O&M-C/E-CH FAC-DUES/SUBSCRIP

352577 01/15/2020 PRD 8922 REXEL USA INC. 237129 X842956 12/18/2019 01/12/20 426.23
 Invoice: X842956 PW/LED BULBS

426.23 73011183 531100 O&M-C/E-CH FAC-SUPPLIES

CHECK 352577 TOTAL: 433.54

352578 01/15/2020 PRD 9331 PRECISION CONCRETE C 237125 PAYREQFINAL-1039 12/19/2019 21900072 01/12/20 84,204.37
 Invoice: PAYREQFINAL-1039 SIDEWALK REPAIRS

84,204.37 73111261 54810001039 SIDEWALK ASSESS & RPR-REPAIRS

CHECK 352578 TOTAL: 84,204.37

352579 01/15/2020 PRD 9349 PROPANE NORTHWEST 237126 1500528846 11/26/2019 01/12/20 778.50
 Invoice: 1500528846 PW/753 GAL PROPANE

778.50 91011897 547200 GG-C/E-O&M YARD FAC-PROPANE

352579 01/15/2020 PRD 9349 PROPANE NORTHWEST 237127 1500563698 12/01/2019 01/12/20 1.00
 Invoice: 1500563698 PW/TANK RENT FEE

1.00 73011897 545000 O&M-C/E-PWYD FAC-RENTS

352579 01/15/2020 PRD 9349 PROPANE NORTHWEST 237128 1500623181 12/11/2019 01/12/20 566.05
 Invoice: 1500623181 PW/420.1 GAL PROPANE

566.05 91011897 547200 GG-C/E-O&M YARD FAC-PROPANE

CHECK 352579 TOTAL: 1,345.55

352580 01/15/2020 PRD 2203 PUBLIC SAFETY TESTIN 237130 2019-0816 12/23/2019 01/12/20 264.00
 Invoice: 2019-0816 HR/Q4 TESTING SUBX

264.00 91011211 541100 GG-C/E-CIVIL SVC-PROF SVCS

CHECK 352580 TOTAL: 264.00

352581 01/15/2020 PRD 1205 PUGET SOUND ENERGY 237156 CITY HALL DEC19 01/02/2020 01/12/20 5,169.88
 Invoice: CITY HALL DEC19 CITY HALL DEC 2019

5,169.88 91011189 547100 GG-C/E-CITY HALL-ELECTRIC

CHECK 352581 TOTAL: 5,169.88

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CASH ACCOUNT: 635 111100 CASH

CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC

352582	01/15/2020	PRTD	7026 RHITHRON ASSOCIATES,	237158	3097	12/17/2019		01/12/20	1,925.00
	Invoice: 3097					AQUATIC BIOASSESSMENT SERVICE			
			1,925.00	72637319	54110000809	WATER QUAL FLOW MONIT-PRO SVCS			
						CHECK	352582	TOTAL:	1,925.00
352583	01/15/2020	PRTD	9287 RIDGEBACK EXCAVATING	237134	PAYREQ3-851	12/31/2019	21900059	01/12/20	11,330.41
	Invoice: PAYREQ3-851					2019 WANNUAL DRAINAGE PROJECT			
			11,330.41	72431835	54810000851	2019 DRAINAGE/CULVERT R&M			
				237135	PAYREQ4-851	12/19/2019	21900059	01/12/20	21,611.39
	Invoice: PAYREQ4-851					2019 WANNUAL DRAINAGE PROJECT			
			21,611.39	72431835	54810000851	2019 DRAINAGE/CULVERT R&M			
						CHECK	352583	TOTAL:	32,941.80
352584	01/15/2020	PRTD	639 EDWARD ROSENBAUM, PH	237138	314085	12/20/2019		01/12/20	325.00
	Invoice: 314085					POL/PRE-HIRE TESTING			
			325.00	53011212	5411100	POLICE - C/E PATROL PROF SVCS			
						CHECK	352584	TOTAL:	325.00
352585	01/15/2020	PRTD	8469 SAGE CONTROL ORDNANC	237139	13104	12/04/2019		01/12/20	750.00
	Invoice: 13104					POL/LESS-LETHAL TRNG: TOVAR			
			750.00	53011212	443410	POLICE - C/E PATROL TRAINING			
						CHECK	352585	TOTAL:	750.00
352586	01/15/2020	PRTD	9366 SCHMUGGE, ROBERT	236997	83131	01/02/2020		01/12/20	125.46
	Invoice: 83131					UB 10831 840 CHERRY AVENUE NE			
			125.46	411	122100	WATER ACCOUNTS RECEIVABLE			
						CHECK	352586	TOTAL:	125.46
352587	01/15/2020	PRTD	7240 SEECLICKFIX	237202	2019-2487	12/27/2019		01/12/20	2,750.00
	Invoice: 2019-2487					IT/SCF 6M LICENSE			
			2,750.00	81011881	548500	IT - C/E COMPUTER SUPPORT			
						CHECK	352587	TOTAL:	2,750.00
352588	01/15/2020	PRTD	7385 CHARLES P. SHANE	237140	002324	12/30/2019		01/12/20	204.00
	Invoice: 002324					LEGAL/PUB DEF#13122318			
			204.00	32011281	541113	LGL-PUBLIC DEFENDER			

CASH ACCOUNT: 635 111100 CASH

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INVOICE DTL DESC									
									CHECK 352588 TOTAL: 204.00
352589	01/15/2020	PRTD	8855 SOUND LAW CENTER	237223	2355	01/06/2020		01/12/20	595.00
			Invoice: 2355	HEX/PROF SVCS DEC 2019					
				595.00	34470586	54111001056	HEX-WINSLOW HOTEL(SL)		
									CHECK 352589 TOTAL: 595.00
352590	01/15/2020	PRTD	601 SOUND REPROGRAPHICS	237203	75318	01/03/2020		01/12/20	253.54
			Invoice: 75318	ENG/PROCEDURES MANUAL					
				253.54	72011322	531100	ENG - C/E PLANS SUPPLIES		
									CHECK 352590 TOTAL: 253.54
352591	01/15/2020	PRTD	9065 SOUNDWEST ENGINEERIN	237142	05-01-12	12/13/2019		01/12/20	190.00
			Invoice: 05-01-12	COUNTRY CLUB BULKHEAD & CULVER					
				190.00	72111425	54110000781	CO CLUB RD BULKHEAD R&M-PRO SV		
				237143	05-01-13	01/03/2020		01/12/20	737.50
			Invoice: 05-01-13	COUNTRY CLUB BULKHEAD & CULVER					
				737.50	72111425	54110000781	CO CLUB RD BULKHEAD R&M-PRO SV		
									CHECK 352591 TOTAL: 927.50
352592	01/15/2020	PRTD	8738 SPEAKWRITE, LLC	237144	FAAC2889	01/01/2020		01/12/20	618.00
			Invoice: FAAC2889	POL/TRANSCRIPTION					
				618.00	52011212	541100	POLICE - C/E INVEST PROF SVCS		
									CHECK 352592 TOTAL: 618.00
352593	01/15/2020	PRTD	8132 SPECTRA LABORATORIES	237145	19-09444	12/17/2019		01/12/20	138.00
			Invoice: 19-09444	PW/ROCKAWAY TESTING					
				138.00	73415345	54110000391	LAB SVCS-WATER ROCKAWAY		
				237146	19-09350	12/13/2019		01/12/20	105.80
			Invoice: 19-09350	PW/ECOLI TESTING					
				105.80	73411345	54110000391	LAB SVCS-WATER		
				237147	19-09351	12/13/2019		01/12/20	42.32
			Invoice: 19-09351	PW/PW ECOLI TESTING					
				42.32	73011897	54110000391	LAB SVCS-PWY FAC		
				237149	19-09486	12/19/2019		01/12/20	93.15
			Invoice: 19-09486	PW/FLOURIDE TESTING					
				93.15	73411345	54110000391	LAB SVCS-WATER		
				237150	19-09485	12/19/2019		01/12/20	94.53

CASH ACCOUNT: 635 111100 CASH
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CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	
						INVOICE DTL DESC				
Invoice: 19-09485						PW/ROCKAWAY TESTING				
						94.53	73415345 54110000391	LAB SVCS-WATER ROCKAWAY		
								CHECK 352593 TOTAL:	473.80	
352594	01/15/2020	PRTD	2467 STAPLES	237159	3430112773	11/02/2019		01/12/20	341.21	
Invoice: 3430112773						PW/OFFICE SUPPLIES				
						341.21	73637891 531100	OFFICE SUPPLIES		
								CHECK 352594 TOTAL:	341.21	
352595	01/15/2020	PRTD	9367 STEYER, MARTIN	236998	83132	01/02/2020		01/12/20	11.62	
Invoice: 83132						UB 10424 179 WOOD AVENUE SW				
						11.62	411 122100	WATER ACCOUNTS RECEIVABLE		
								CHECK 352595 TOTAL:	11.62	
352596	01/15/2020	PRTD	5730 SUMMIT LAW GROUP	237160	109695	12/18/2019		01/12/20	4,315.50	
Invoice: 109695						LEGAL/PROF SVCS NOV 2019				
						4,315.50	32011152 54111000870	LGL-HR (NON-BARGAINING)		
						237161	109696	12/18/2019	01/12/20	3,024.00
Invoice: 109696						LEGAL/PROF SVCS NOV 2019				
						3,024.00	32011152 54111000274	LGL-LABOR NEGOTIATIONS		
								CHECK 352596 TOTAL:	7,339.50	
352597	01/15/2020	PRTD	8244 THE HOME DEPOT PRO	237086	527597124	12/19/2019		01/12/20	1,513.03	
Invoice: 527597124						PW/MX SUPPLIES				
						1,513.03	73637948 531100	O&M ALLOC-CITY WIDE SUPPLIES		
								CHECK 352597 TOTAL:	1,513.03	
352598	01/15/2020	PRTD	565 TACOMA SCREW PRODUCT	237162	14352734	12/17/2019		01/12/20	11.14	
Invoice: 14352734						PW/WASHERS				
						11.14	73638935 531100	O&M-STD ALLOCATION-SUPPLIES		
								CHECK 352598 TOTAL:	11.14	
352599	01/15/2020	PRTD	6714 TOSHIBA FINANCIAL SE	237164	26143888	12/23/2019		01/12/20	188.58	
Invoice: 26143888						CRT/E-STUDIO3005AC LEASE				
						188.58	21011125 545000	COURT - RENTS & LEASES - OPER		
								CHECK 352599 TOTAL:	188.58	

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CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

										INVOICE DTL DESC	
352600	01/15/2020	PRTD	558 TOWN & COUNTRY MARKE	237165	12/20/19	12/20/2019		01/12/20	45.46		
Invoice: 12/20/19										PW/STORM RESPONSE MEALS	
				45.46	73431252	53110001000	2019	STORM RESP-SSWM-SUPPLIES			
352600	01/15/2020	PRTD	558 TOWN & COUNTRY MARKE	237166	12/20/19-A	12/20/2019		01/12/20	7.63		
Invoice: 12/20/19-A										PW/STORM RESPONSE MEAL	
				7.63	73431252	53110001000	2019	STORM RESP-SSWM-SUPPLIES			
352600	01/15/2020	PRTD	558 TOWN & COUNTRY MARKE	237167	12/18/19	12/18/2019		01/12/20	19.98		
Invoice: 12/18/19										EX/DEC B-DAYS	
				19.98	31011131	531100		EX-GF-SUPPLIES			
									CHECK	352600 TOTAL:	73.07
352601	01/15/2020	PRTD	9322 TRAFFICALM SYSTEMS	237168	INV437TC	12/30/2019	21900066	01/12/20	2,237.77		
Invoice: INV437TC										FULL MATRIX DRIVER FEEDBACK SI	
				2,237.77	73111264	531100		O&M-STREET-TRAF CONTROL-SUPPLY			
									CHECK	352601 TOTAL:	2,237.77
352602	01/15/2020	PRTD	4929 TYLER TECHNOLOGIES I	237204	045-286143	01/01/2020		01/12/20	13,915.04		
Invoice: 045-286143										IT/QTRLY MAINT SOFTWARE	
				13,915.04	81011881	548500		IT - C/E COMPUTER SUPPORT			
									CHECK	352602 TOTAL:	13,915.04
352603	01/15/2020	PRTD	2425 THE UPS STORE #1265	237170	12/17/19	12/17/2019		01/12/20	34.78		
Invoice: 12/17/19										PW/SHIPPING	
				34.78	91435838	542500		GG-DECANT-POSTAGE/SHIPPING			
352603	01/15/2020	PRTD	2425 THE UPS STORE #1265	237171	12/18/19	12/18/2019		01/12/20	16.71		
Invoice: 12/18/19										PW/SHIPPING	
				16.71	91435838	542500		GG-DECANT-POSTAGE/SHIPPING			
									CHECK	352603 TOTAL:	51.49
352604	01/15/2020	PRTD	1152 USA BLUE BOOK	237172	072945	11/20/2019		01/12/20	274.79		
Invoice: 072945										PW/MAGNETIC STIRRING BAR, FILTERS	
				274.79	73425358	531100		O&M-WWTP-SUPPLIES			
352604	01/15/2020	PRTD	1152 USA BLUE BOOK	237173	093682	12/16/2019		01/12/20	117.52		
Invoice: 093682										PW/BUFFER, ORP SOLUTION	
				117.52	73411345	531100		OFFICE SUPPLIES			
									CHECK	352604 TOTAL:	392.31

CASH ACCOUNT: 635	111100	CASH								
CHECK NO	CHK DATE	TYPE	VENDOR NAME	VOUCHER	INVOICE	INV DATE	PO	CHECK RUN	NET	

352611	01/15/2020	PRTD	952 WASHINGTON STATE PAT	237179	I20004227	01/07/2020		01/12/20	26.50	
			Invoice: I20004227			FIN/DEC19 BACKGROUND CHECKS				
				26.50	41654861 586100	AGENCY DISBURSEMENTS				
								CHECK	352611 TOTAL:	26.50
352612	01/15/2020	PRTD	2251 WA ST TREASURER	237180	DEC19 SBCC	12/31/2019		01/12/20	218.00	
			Invoice: DEC19 SBCC			COURT OUT REMIT DEC19 SBCC				
				218.00	41652860 586000	SBCC BLDG.-OUT				
				237181	DEC19	12/31/2019		01/12/20	4,789.11	
			Invoice: DEC19			COURT OUT REMIT DEC 2019				
				2,102.17	41611860 586000	PSEA 60% OUT				
				911.57	41610860 586000	PSEA 30% OUT				
				55.62	41619860 586000	PSEA 3 - STATE DISB OUT				
				225.85	41616860 586000	THEFT PRV&TR BRAIN INJ-OUT				
				91.01	41616860 586000	THEFT PRV&TR BRAIN INJ-OUT				
				762.51	41614860 586000	JUDICIAL INFO SYST.-OUT				
				112.63	41618860 586000	TRAUMA CARE-OUT				
				137.65	41618860 586000	TRAUMA CARE-OUT				
				31.41	41618860 586000	TRAUMA CARE-OUT				
				178.76	41618860 586000	TRAUMA CARE-OUT				
				11.11	41616860 586812	ACCESS COMM ACCT				
				11.11	41616860 586813	MULTIMODAL ACCT				
				157.71	41615860 586961	STATE CRIME LAB				
								CHECK	352612 TOTAL:	5,007.11
352613	01/15/2020	PRTD	5709 WEBCHECK INC	237227	6505	12/31/2019		01/12/20	228.90	
			Invoice: 6505			UB/WEBCHECK SVCS DEC 2019				
				114.45	43411341 541100	FIN - WATER ADMIN PROF SERVICE				
				114.45	43421351 541100	FIN - SEWER ADMIN PROF SERVICE				
								CHECK	352613 TOTAL:	228.90
352614	01/15/2020	PRTD	499 WESTBAY AUTO PARTS I	237182	507076	12/13/2019		01/12/20	37.56	
			Invoice: 507076			PW/FUEL FILTERS				
				37.56	990 141100	MERCHANDISE				
				237183	508314	12/18/2019		01/12/20	14.39	
			Invoice: 508314			PW/ADAPTER				
				14.39	73411345 531100	OFFICE SUPPLIES				
				237184	508319	12/18/2019		01/12/20	108.25	
			Invoice: 508319			PW/PUMP 2GPM				
				108.25	73111264 531100	O&M-STREET-TRAF CONTROL-SUPPLY				

CASH ACCOUNT: 635 111100 CASH
 CHECK NO CHK DATE TYPE VENDOR NAME VOUCHER INVOICE INV DATE PO CHECK RUN NET

INVOICE DTL DESC									
							CHECK	352614 TOTAL:	160.20
352615	01/15/2020	PRTD	8759 WHISTLE WORKWEAR	237185	197498	12/26/2019		01/12/20	131.01
			Invoice: 197498			PW/BOOTS FOR DELBERT			
				131.01	73425358 531100	O&M-WWTP-SUPPLIES			
							CHECK	352615 TOTAL:	131.01
352616	01/15/2020	PRTD	522 WA ST DEPT OF TRANSP	237186	RE-313-ATB91216139	12/16/2019		01/12/20	1,595.11
			Invoice: RE-313-ATB91216139			ENG/OLY DR NM PROJ MGMT			
				1,595.11	72334951 64110000596	SR305-OLYMPIC NM-ENG/DESIGN			
							CHECK	352616 TOTAL:	1,595.11
352617	01/15/2020	PRTD	6920 COMCAST	237206	JAN20	12/20/2019		01/12/20	11.36
			Invoice: JAN20			POL/HD CONVERTER BOX			
				11.36	51011211 545000	PD-C/E-ADMIN RENTS/LEASE			
							CHECK	352617 TOTAL:	11.36
352618	01/15/2020	PRTD	2607 ZEE MEDICAL SERVICE	237187	68391071	12/26/2019		01/12/20	59.83
			Invoice: 68391071			POL/FIRST AID RESTOCK			
				59.83	51011215 531100	POLICE - C/E FACIL SUPPLIES			
				237188	68391058	12/20/2019		01/12/20	305.09
			Invoice: 68391058			PW/FIRST AID RESTOCK			
				305.09	73637891 531100	OFFICE SUPPLIES			
				237189	68391056	12/20/2019		01/12/20	126.55
			Invoice: 68391056			CH FIRST AID RESTOCK			
				126.55	91011183 531100	GG-C/E-CH CLEANING-SUPPLIES			
							CHECK	352618 TOTAL:	491.47
352619	01/15/2020	PRTD	8875 ZETX, INC	237207	WA20-0180700	12/16/2019		01/12/20	2,020.00
			Invoice: WA20-0180700			POL/ANNUAL SUBX			
				2,020.00	52011212 549100	PD-C/E-INV-DUES/SUBSCR/MEMBRSH			
							CHECK	352619 TOTAL:	2,020.00

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|CITY OF BAINBRIDGE ISLAND
|A/P CASH DISBURSEMENTS JOURNAL

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NUMBER OF CHECKS 127 *** CASH ACCOUNT TOTAL *** 535,988.89

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	127	535,988.89

*** GRAND TOTAL *** 535,988.89

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|A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

CLERK: cfreitas

YEAR PER	JNL									
SRC ACCOUNT						ACCOUNT DESC	T OB	DEBIT	CREDIT	
EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC					
2020 1	53									
APP 001-213000					GENERAL - ACCOUNTS PAYABLE			262,465.78		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 635-111100					CASH				535,988.89	
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 403-213000					ACCOUNTS PAYABLE			55,801.09		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 401-213000					ACCOUNTS PAYABLE			4,124.43		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 101-213000					STREETS - ACCOUNTS PAYABLE			101,280.03		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 402-213000					ACCOUNTS PAYABLE			3,133.29		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 631-213000					ACCOUNTS PAYABLE			17,710.01		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 622-213000					ACCOUNTS PAYABLE			150.00		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 407-213000					ACCOUNTS PAYABLE			8,420.00		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 301-213000					ACCOUNTS PAYABLE			74,535.98		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 650-213000					ACCOUNTS PAYABLE			5,330.72		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 104-213000					CIVIC IMPR - ACCOUNTS PAYABLE			3,000.00		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
APP 901-213000					ACCOUNTS PAYABLE			37.56		
01/15/2020	01/12/20	011520			AP CASH DISBURSEMENTS JOURNAL					
					GENERAL LEDGER TOTAL			535,988.89	535,988.89	
APP 631-130000					DUE TO/FROM CLEARING			518,278.88		
01/15/2020	01/12/20	011520								
APP 001-130000					GENERAL - DUE TO/FROM CLEARING				262,465.78	
01/15/2020	01/12/20	011520								
APP 403-130000					DUE TO/FROM CLEARING				55,801.09	
01/15/2020	01/12/20	011520								
APP 401-130000					DUE TO/FROM CLEARING				4,124.43	
01/15/2020	01/12/20	011520								
APP 101-130000					STREETS - DUE TO/FROM CLEARING				101,280.03	
01/15/2020	01/12/20	011520								
APP 402-130000					DUE TO/FROM CLEARING				3,133.29	
01/15/2020	01/12/20	011520								
APP 622-130000					DUE TO/FROM CLEARING				150.00	
01/15/2020	01/12/20	011520								
APP 407-130000					DUE TO/FROM CLEARING				8,420.00	
01/15/2020	01/12/20	011520								
APP 301-130000					DUE TO/FROM CLEARING				74,535.98	

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JOURNAL ENTRIES TO BE CREATED

YEAR PER	JNL	ACCOUNT DESC	T OB	DEBIT	CREDIT
SRC ACCOUNT	JNL DESC	LINE DESC			
EFF DATE	REF 1	REF 2	REF 3		
01/15/2020	01/12/20	011520			
APP 650-130000		DUE TO/FROM CLEARING			5,330.72
01/15/2020	01/12/20	011520			
APP 104-130000		CIVIC IMPR DUE TO/FROM CLEAR'G			3,000.00
01/15/2020	01/12/20	011520			
APP 901-130000		DUE TO/FROM CLEARING			37.56
01/15/2020	01/12/20	011520			
SYSTEM GENERATED ENTRIES TOTAL				518,278.88	518,278.88
JOURNAL 2020/01/53 TOTAL				1,054,267.77	1,054,267.77

JOURNAL ENTRIES TO BE CREATED

FUND	YEAR	PER	JNL	EFF DATE	DEBIT	CREDIT
ACCOUNT				ACCOUNT DESCRIPTION		
001 GENERAL FUND	2020	1	53	01/15/2020		
001-130000				GENERAL - DUE TO/FROM CLEARING		262,465.78
001-213000				GENERAL - ACCOUNTS PAYABLE	262,465.78	
				FUND TOTAL	262,465.78	262,465.78
101 STREET FUND	2020	1	53	01/15/2020		
101-130000				STREETS - DUE TO/FROM CLEARING		101,280.03
101-213000				STREETS - ACCOUNTS PAYABLE	101,280.03	
				FUND TOTAL	101,280.03	101,280.03
104 CIVIC IMPROVEMENT FUND	2020	1	53	01/15/2020		
104-130000				CIVIC IMPR DUE TO/FROM CLEAR'G		3,000.00
104-213000				CIVIC IMPR - ACCOUNTS PAYABLE	3,000.00	
				FUND TOTAL	3,000.00	3,000.00
301 CAPITAL CONSTRUCTION FUND	2020	1	53	01/15/2020		
301-130000				DUE TO/FROM CLEARING		74,535.98
301-213000				ACCOUNTS PAYABLE	74,535.98	
				FUND TOTAL	74,535.98	74,535.98
401 WATER OPERATING FUND	2020	1	53	01/15/2020		
401-130000				DUE TO/FROM CLEARING		4,124.43
401-213000				ACCOUNTS PAYABLE	4,124.43	
				FUND TOTAL	4,124.43	4,124.43
402 SEWER OPERATING FUND	2020	1	53	01/15/2020		
402-130000				DUE TO/FROM CLEARING		3,133.29
402-213000				ACCOUNTS PAYABLE	3,133.29	
				FUND TOTAL	3,133.29	3,133.29
403 STORM & SURFACE WATER FUND	2020	1	53	01/15/2020		
403-130000				DUE TO/FROM CLEARING		55,801.09
403-213000				ACCOUNTS PAYABLE	55,801.09	
				FUND TOTAL	55,801.09	55,801.09
407 BUILDING & DEVELOPMENT FUND	2020	1	53	01/15/2020		
407-130000				DUE TO/FROM CLEARING		8,420.00
407-213000				ACCOUNTS PAYABLE	8,420.00	
				FUND TOTAL	8,420.00	8,420.00
622 EXPENDABLE TRUST FUND	2020	1	53	01/15/2020		

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
622-130000				DUE TO/FROM CLEARING		150.00
622-213000				ACCOUNTS PAYABLE	150.00	
FUND TOTAL					150.00	150.00
631 CLEARING FUND	2020 1	53	01/15/2020			
631-130000				DUE TO/FROM CLEARING	518,278.88	
631-213000				ACCOUNTS PAYABLE	17,710.01	
635-111100				CASH		535,988.89
FUND TOTAL					535,988.89	535,988.89
650 AGENCY FUND	2020 1	53	01/15/2020			
650-130000				DUE TO/FROM CLEARING		5,330.72
650-213000				ACCOUNTS PAYABLE	5,330.72	
FUND TOTAL					5,330.72	5,330.72
901 CITY-WIDE REPORTING FUND	2020 1	53	01/15/2020			
901-130000				DUE TO/FROM CLEARING		37.56
901-213000				ACCOUNTS PAYABLE	37.56	
FUND TOTAL					37.56	37.56

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CITY OF BAINBRIDGE ISLAND
A/P CASH DISBURSEMENTS JOURNAL

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JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FROM
001	GENERAL FUND		262,465.78
101	STREET FUND		101,280.03
104	CIVIC IMPROVEMENT FUND		3,000.00
301	CAPITAL CONSTRUCTION FUND		74,535.98
401	WATER OPERATING FUND		4,124.43
402	SEWER OPERATING FUND		3,133.29
403	STORM & SURFACE WATER FUND		55,801.09
407	BUILDING & DEVELOPMENT FUND		8,420.00
622	EXPENDABLE TRUST FUND		150.00
631	CLEARING FUND	518,278.88	
650	AGENCY FUND		5,330.72
901	CITY-WIDE REPORTING FUND		37.56
	TOTAL	518,278.88	518,278.88

** END OF REPORT - Generated by Carrie L. Freitas **



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME:

AGENDA ITEM: City Council Study Session Minutes, December 3, 2019

SUMMARY: Consider approval of meeting minutes.

AGENDA CATEGORY: Consent Agenda

PROPOSED BY: Executive

RECOMMENDED MOTION: Approve with Consent Agenda.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[City Council Study Session Minutes December 3, 2019](#)

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

CITY COUNCIL STUDY SESSION
TUESDAY, DECEMBER 3, 2019

MEETING MINUTES

1) [CALL TO ORDER / ROLL CALL](#)

Mayor Medina called the meeting to order at 6:00 p.m. in Council Chambers.

Mayor Medina, Deputy Mayor Tirman, and Councilmembers Blossom, Deets, Nassar, Peltier and Schneider were present.

2) EXECUTIVE SESSION

2.A Pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel matters relating to litigation or potential litigation to which the city, the governing body, or a member acting in an official capacity is, or is likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency.
[Cover Page](#)

Mayor Medina adjourned the meeting to an executive session pursuant to RCW 42.30.110(1)(i). At 6:25 p.m., City Council extended the executive session for an additional ten minutes.

Council returned from executive session at 6:35 p.m., and Mayor Medina re-convened the meeting at 6:37 p.m.

3) [APPROVAL OF AGENDA/ CONFLICT OF INTEREST DISCLOSURE](#)

Councilmember Deets moved and Councilmember Peltier seconded to approve the agenda as presented. The motion was approved by unanimous consent.

4) [MAYOR'S REPORT](#)

Mayor Medina mentioned a potential 5:00 p.m. start for the December 10, 2019 City Council meeting, the Winter Wonderland festival, community climate workshops, and the timing for the next discussion of the Suzuki project.

5) PRESENTATIONS

5.A Greenhouse Gas Inventory Report - Executive
[Cover Page](#)
[BainbridgeGHGFactSheet](#)
[Bainbridge_GHG Inventory Report](#)

Deputy City Manager Schroer introduced the agenda item. Andrea Martin from Cascadia Consulting Group provided a presentation on the Greenhouse Gas Inventory report and addressed Council's questions.

6) UNFINISHED BUSINESS

6.A Identification of Benchmarks for Climate Action Plan - Executive, Climate Change Advisory Committee

Cover Page

CCAC December 3rd City Council Presentation on Targets

CCAC Climate Action Plan Goals and Focus Areas

Chair Mike Cox and Vice Chair David McCaughey from the Climate Change Advisory Committee provided a presentation on the goals of the Climate Action Plan. Council discussed the goals.

6.B Traffic Calming Program Next Steps - Public Works

Cover Page

Staff Memo_Traffic Calming

Attachment A_Traffic Calming Program.docx

Resolution No. 2019-06 Directing Use of Additional Vehicle License Fee Revenue Approved 012219.pdf

Traffic Calming Presentation 120319.pdf

Public Works Director Wierzbicki provided a presentation on the proposed traffic calming program. Council discussed the program and directed staff to provide signage for Manitou Beach and Point White, in addition to the signage proposed by staff.

6.C Update on the Development Moratorium - Planning

Cover Page

Abbreviated Moratorium Work Program Status Report

Moratorium Extension Handout Final 100419

Ordinance No. 2019-26 Extending the Development Moratorium Approved 092419

Senior Planner Sutton provided an update on the moratorium.

7) NEW BUSINESS

7.A Town Square Cover Discussion - Public Works

Cover Page

Staff Memo Town Square Cover

Town Square Cover Presentation

Public Works Director Wierzbicki provided a presentation on the Town Square cover proposal. Council discussed the options for the cover and forwarded the item to a future meeting for further discussion following additional work by staff on the options.

Mayor Medina adjourned the meeting for a break at 8:44 p.m. and re-convened the meeting at 8:50 p.m.

8) CITY COUNCIL DISCUSSION

8.C [Moved] Bainbridge Island Community Bill of Rights Ordinance - Councilmembers Nassar and Peltier

[Cover Page](#)

[Updated Bainbridge Island Community Bill of Rights Ordinance](#)

Mayor Medina suggested moving up the Bainbridge Island Community Bill of Rights discussion since Councilmember Nassar planned to leave the meeting early, and Council concurred.

Sean Butler and Kai Huschke joined Council for the discussion. The ordinance will be discussed further at a future meeting.

Councilmember Nassar left the meeting at 9:32 p.m.

8.A Proposal for Matching Funds for Dana's Trail - Councilmember Schneider

[Cover Page](#)

[Squeaky Wheels Offer for Dana's Trail](#)

[Dana's Trail Key Points and Cost Summary](#)

[Dana's Trail Detailed Cost Estimate](#)

[Dana's Trail Map](#)

[Dana's Trail Schools Map](#)

Councilmember Schneider introduced the agenda item. Council discussed the proposal and forwarded it to the next business meeting for consideration of approval.

8.B Communications with Advisory Committees - Mayor Medina

[Cover Page](#)

Mayor Medina introduced the agenda item. Council discussed the role of a liaison, and Mayor Medina's proposed job description. Council forwarded the item to a January meeting for further discussion.

8.D City Council Committee and Liaison Assignments - Mayor Medina

[Cover Page](#)

[Draft - 2020 Council Assignments.pdf](#)

Council discussed the process for 2020 committee and liaison assignments. Mayor Medina will circulate a matrix with the assignments to current and incoming Council members.

9) FUTURE COUNCIL AGENDAS

9.A Future Council Agendas

[Cover Page](#)

[City Council Regular Business Meeting, December 10, 2019](#)

Council decided to start the December 10, 2019 City Council meeting at 5:00 p.m. Council scheduled the next discussion of the Suzuki project for the first meeting in January.

10) FOR THE GOOD OF THE ORDER

Councilmember Peltier asked for additional consideration prior to tree removal in Waterfront Park.

11) ADJOURNMENT

Mayor Medina adjourned the meeting at 10:21 p.m.

Leslie Schneider, Mayor

Christine Brown, CMC, City Clerk



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME:

AGENDA ITEM: Special City Council Meeting Minutes, December 10, 2019

SUMMARY: Consider approval of meeting minutes.

AGENDA CATEGORY: Consent Agenda

PROPOSED BY: Executive

RECOMMENDED MOTION: Approve with Consent Agenda.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Special City Council Meeting Minutes December 10, 2019](#)

FISCAL DETAILS:

Fund Name(s):

Coding:



CITY OF
BAINBRIDGE ISLAND

SPECIAL CITY COUNCIL MEETING
TUESDAY, DECEMBER 10, 2019

MEETING MINUTES

1) [CALL TO ORDER/ROLL CALL/PLEDGE OF ALLEGIANCE](#)

Mayor Medina called the meeting to order at 5:05 p.m. in Council Chambers.

Mayor Medina, Deputy Mayor Tirman, and Councilmembers Blossom, Deets, Nassar, Peltier and Schneider were present.

2) [APPROVAL OF AGENDA/CONFLICT OF INTEREST DISCLOSURE](#)

Deputy Mayor Tirman pulled items 12.J and 12.M from the Consent Agenda.

3) [RECOGNITION OF OUTGOING COUNCIL MEMBERS](#)

3.A Recognition of Outgoing Council Members - Executive
[Cover Page](#)

Public Comment

Mary Clare Kersten thanked Councilmembers Blossom and Tirman for their service.

James Halbrook thanked Councilmember Peltier for his service.

M. Venez thanked Councilmembers Peltier and Blossom for their service.

Matthew D. thanked Council for their work.

Olaf Ribeiro thanked Councilmember Peltier for his service.

Lisa Neal read Jane Rein's statement thanking Councilmember Peltier for his service.

Maya thanked Councilmembers Peltier and Blossom for their service.

Sal deRosalia thanked Councilmembers Peltier and Blossom for their service.

Paul Frieda thanked Councilmembers Peltier and Blossom for their service.

Council members thanked Councilmembers Blossom and Peltier for their service.

Councilmember Blossom spoke about the need for affordable housing and the Suzuki project.

Councilmember Peltier spoke about his term on Council.

Mayor Medina adjourned the meeting at 6:01 p.m. for a break and re-convened the meeting at 6:16 p.m.

4) PUBLIC COMMENT

Cindy Anderson spoke in favor of the Race Equity Task Force.

Larry Koss spoke about the Waterfront Park trees.

Derek Villanueva spoke in favor of the Race Equity Task Force.

Ann Lovejoy spoke in favor of the Race Equity Task Force.

Karen Vargas spoke in favor of the Race Equity Task Force.

Brenda Fantroy-Johnson spoke in favor of the Race Equity Task Force.

Deanna Martinez spoke in favor of the Race Equity Task Force.

Sal DeRosalia spoke in favor of the Race Equity Task Force.

M. Venez spoke in favor of the Race Equity Task Force.

Janna Chan spoke in favor of funding the Race Equity Task Force.

Jonathan Davis spoke about the Green Building Code and the Housing Design Demonstration Program (HDDP).

6) MAYOR'S REPORT

Mayor Medina mentioned the process for committee assignments, the Climate Action Plan Community workshop, and a social party for Council members.

7) CITY MANAGER'S REPORT

City Manager Smith mentioned the Climate Action Plan Community Workshop, Planning and Public Works counter closures, Salary Commission recruitment, and holiday closures.

5) PRESENTATION(S)

5.A Proposed 2020 Work Plan for Race Equity Task Force - RETF Representatives and Councilmembers Deets and Nassar

Cover Page

RETF - 2020 Scope of Work Proposal

Councilmember Deets invited public comment.

Public Comment

Vice Chair Sue Wilmot spoke about the Race Equity Task Force.

Debbie Haase spoke in favor of the Race Equity Task Force.

Baharini Ali spoke in favor of the Race Equity Task Force.

Annie Moffat spoke in favor of the Race Equity Task Force.

Savanna Rovelstad spoke in favor of the Race Equity Task Force.

Peggi Ericksen spoke in favor of the Race Equity Task Force.

James Friday spoke in favor of the Race Equity Task Force.

Council discussed the budget with task force members and City Manager Smith.

MOTION: I move to approve the Race Equity Task Force's workplan and budget.

Deets/Nassar: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None

ABSENT: None

ABSTAIN: None

8) EXECUTIVE SESSION

8.A Pursuant to RCW 42.30.110(1)(i), to discuss with legal counsel matters relating to litigation or potential litigation to which the city, the governing body, or a member acting in an official capacity is, or is likely to become, a party, when public knowledge regarding the discussion is likely to result in an adverse legal or financial consequence to the agency.
[Cover Page](#)

Mayor Medina adjourned the meeting for an executive session at 7:08 p.m. Council returned from executive session at 7:26 p.m., and Mayor Medina re-convened the meeting.

5.A Proposed 2020 Work Plan for Race Equity Task Force - RETF Representatives and Councilmembers Deets and Nassar [Continued]
[Cover Page](#)
[RETF - 2020 Scope of Work Proposal](#)

Mayor Medina noted that Council needed to extend the term of the Race Equity Task Force.

MOTION: I move to extend the Race Equity Task Force through 2020, and I think we would extend all of the terms throughout that period.

Deets/Nassar: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

9) UNFINISHED BUSINESS

9.A Proposed Workplan for Green Building Code Options - Planning

[Cover Page](#)

[Staff Memo 20191210](#)

[Presentation Green Building Discussion \(20191105\)](#)

Planning Director Wright introduced the agenda item.

Public Comment

Mike Cox spoke about Climate Change Advisory Committee's participation in the task force and the goals.

AMENDED MOTION: I move to create a Green Building Code Task Force composed of nine green building experts, qualifications to be determined, with one Council liaison.

Nassar/Peltier: The motion carried unanimously, 7-0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

9.B Ordinance No. 2019-32 Amending BIMC 2.16.020.S. Housing Design Demonstration Projects (HDDP) Program - Planning

[Cover Page](#)

[20191204 Staff Memo.docx](#)

[Ordinance No. 2019-32 Extending HDDP Program](#)

[20191203 Exhibit A BIMC 2.16.020.S HDDP Program.docx](#)

[Planning Commission Minutes DRAFT 110719](#)

[Planning Commission Rationale for HDDP Sunset 111819](#)

[HDDP Program Summary](#)

[BIMC 2.16.020.S HDDP Program](#)

[Comp Plan Goals and Polices to support HDDP](#)

[Ordinance No. 2018-31 Limiting the Housing Design Demonstration Project Program to Affordable Housing Approved 082818](#)

[Planning Commission Minutes 062118](#)

Senior Planner Sutton introduced the agenda item.

MOTION: I move to change any references in BIMC 2.16.020.S.4.A(iii), that we amend this, that rather than stating it will remain affordable in perpetuity, it will remain affordable for 99 years. Clarification: Change all references in the ordinance from perpetuity to 99 years.

Blossom/Nassar: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

MOTION: I move to approve Ordinance No. 2019-32, as amended.
Tirman/Deets: The motion carried, 5 – 2.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina
NOES: Ron Peltier, Rasham Nassar
ABSENT: None
ABSTAIN: None

9.C Sustainable Transportation Plan Goals Discussion - Public Works [Cover Page](#)

Mayor Medina introduced the agenda item, and Council discussed the goals.

Deputy Mayor Tirman left the meeting at 8:06 p.m. and joined by telephone.

Public Comment

Fran Korten spoke in favor of setting an ambitious goal and commented on the scope of work.

MOTION: I move to approve that the goal for the Sustainable Transportation Plan is to develop a transportation network for the island that achieves a 90% carbon emissions reduction in our transportation system by 2040.

Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

9.D Sustainable Transportation Professional Services Agreement Award and Budget Amendment - Public Works [Cover Page](#) [Professional Services Agreement - Nelson Nygaard](#)

Project Manager Epstein introduced the agenda item.

AMENDED MOTION: I move that we direct staff that Council will be involved in choosing the members of the stakeholder group for the Sustainable Transportation Plan.

Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None
ABSENT: None
ABSTAIN: None

MOTION: I move that we consider the scope of work with a metric of 50% women in our mode shifts.
Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

Councilmember Schneider clarified that the motion means that when we set our mode shift goals, we have an additional requirement that we are shooting for at least fifty percent of that mode share to be women.

MOTION: I move to include in the scope of work two Council intensive study sessions with Nelson Nygaard at the beginning of the work to include one focused session to discuss defining complex concepts of the plan and the second to discuss the project cost and funding.
Nassar/Peltier: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

MOTION: I move to forward the Sustainable Transportation Professional Services Agreement award, and a budget amendment in the amount of \$134,000 in additional funds from the City Council contingency funds, to January 14, 2020 Consent Agenda.
Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

9.E Police and Court Project Update and Sustainability Discussion - Public Works
[Cover Page](#)
[Presentation - Police and Court Project Sustainability Update](#)
[LEED BD_C COBI Police and Court](#)
[LEED ID_C COBI Police and Court](#)

Project Manager Loveless provided a presentation on the project status, and Council discussed the project.

Public Comment

Don Willott spoke about sustainable transportation elements.

AMENDED MOTION: I move to direct staff to come back to us with options for achieving LEED Gold with the flexibility of offsets in the community and bring back financial analysis for increasing budget by \$800,000 in order to achieve LEED Gold certification.

Schneider/Peltier: The motion carried, 6 – 1.

AYES: Sarah Blossom, Ron Peltier, Rasham Nassar, Joe Deets, Leslie Schneider, Kol Medina

NOES: Matt Tirman

ABSENT: None

ABSTAIN: None

Mayor Medina adjourned the meeting for a break at 9:11 p.m. and re-convened the meeting at 9:16 p.m.

9.F Downtown Wayfinding Signage Project Funding Request - Public Works

[Cover Page](#)

[BI Downtown Wayfinding Signage LTAC Application](#)

[Chamber of Commerce Wayfinding Support Letter 082119](#)

[BIDA Letter of Support for Wayfinding Signage](#)

Public Works Director Wierzbicki answered Council's questions on the item.

MOTION: I move to approve funding the balance of the Downtown Wayfinding Signage Project with \$24,000 from the 2020 City Council contingency fund.

Nassar/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None

ABSENT: None

ABSTAIN: None

9.G Proposal for Matching Funds for Dana's Trail - Councilmember Schneider

[Cover Page](#)

[Squeaky Wheels Offer for Dana's Trail](#)

[Dana's Trail Key Points and Cost Summary](#)

[Dana's Trail Detailed Cost Estimate](#)

[Dana's Trail Map](#)

[Dana's Trail Schools Map](#)

Mayor Medina introduced the agenda item.

Public Comment

Elise Nelson spoke in favor of the project.

MOTION: I move to authorize City support for the Squeaky Wheels proposal related to improvements on a segment of the "Dana's Trail" project located on Bainbridge Island School District property, contingent on the support of the Bainbridge Island School District for the project.

Nassar/Schneider: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

12.J [Pulled from Consent Agenda] Ordinance 2019-24 Updating Bainbridge Island Municipal Code Sections 2.16.040, 2.16.050, 2.16.070, 2.16.110, 18.09.020, 18.09.030, and 18.36.030 Related to Public Participation Meetings for Short Plats, and Decision Criteria for Site Plan and Design Review and Conditional Use Permits - Planning

Cover Page
PC Staff Memo re Ord 2019-24
Ord 2019-24 - Revisions to BIMC 2.16, 18.09, and 18.36
Exhibit A Title 2 Changes
Exhibit A Clean
Exhibit B 18.09 Use Table
Revised Exhibit C Use Specific Standards

Senior Planner Sutton introduced the agenda item.

MOTION: I move to approve Ordinance No. 2019-24.
Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

12.M [Pulled from Consent Agenda] Old Treatment Plant Pump Station Replacement Project Final Change Order- Public Works

Cover Page
OTP Final Change Order
OTP Worksheet.pdf

Public Works Director Wierzbicki introduced the agenda item.

MOTION: I move to authorize the City Manager to approve the final change order, in the amount of \$46,232.06, for the Old Treatment Plant Pump Station Replacement Project and to approve the revised contract amount of \$415,939.47 for the project.
Peltier/Nassar: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

10) NEW BUSINESS

10.A Winter Weather Preparedness Briefing - Executive

Cover Page

12102019 EM Presentation to CC Winter Weather.pptx

Emergency Management Coordinator LeSage provided a briefing on winter weather preparedness.

10.B Comprehensive Emergency Management Plan (CEMP) Overview - Executive

Cover Page

12102019 EM Presentation to CC CEMP.pptx

2019 CEMP Final

Emergency Management Coordinator LeSage provided a presentation on the plan.

10.C Memorandum of Understanding with Seattle Police Department Regarding Agency Participation in the Internet Crimes Against Children (ICAC) Multi-Jurisdictional Task Force - Police

Cover Page

NW Regional Task Force Memorandum of Understanding

City Manager Smith introduced the agreement.

MOTION: I move to forward the Memorandum of Understanding with the Seattle Police Department Regarding Agency Participation in the Internet Crimes Against Children (ICAC) for approval with the January 14, 2020 Consent Agenda.

Deets/Peltier: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None

ABSENT: None

ABSTAIN: None

10.D Information Technology Division Position Change to Full-Time - Executive

Cover Page

Request to increase IT position FTE for CC 12102019

Deputy City Manager Schroer introduced the agenda item.

MOTION: I move that the position currently approved as a part-time Senior Information Technology Specialist be increased to a full-time Senior Information Technology Specialist with a corresponding increase to the authorized budget.

Deets/Blossom: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None

ABSENT: None
ABSTAIN: None

10.E Collective Bargaining Agreement between the City of Bainbridge Island and the International Association of Machinists and Aerospace Workers - Executive

[Cover Page](#)
[IAM Collective Bargaining Agreement 2020-2022](#)
[IAM Contract Summary](#)

City Manager Smith introduced the agenda item.

MOTION: I move to authorize the City Manager to execute the collective bargaining agreement with the International Association of Machinists and Aerospace Workers for the period covering January 1, 2020 through December 31, 2022.

Schneider/Deets: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

10.F Set Public Hearing on Ordinance No. 2019-40, Adopting a Moratorium on Self-Service Storage Facilities - Planning

[Cover Page](#)
[Ordinance No 2019-40 Adopting a Moratorium on Self-Storage Facilities Approved 112619](#)

Planning Director Wright introduced the agenda item.

MOTION: I move to hold a public hearing on Ordinance No. 2019-40 as part of the agenda for the January 14, 2020 Council meeting.

Deets/Peltier: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar
NOES: None
ABSENT: None
ABSTAIN: None

11) CITY COUNCIL DISCUSSION

11.A Review Council Ad Hoc Committees - Mayor Medina

[Cover Page](#)
[Council Ad Hoc Committee Spreadsheet](#)
[Affordable Housing Ad Hoc Committee Formation Request](#)
[Suzuki Development Partner Ad Hoc Committee Formation Request](#)
[Youth Mental Health Workshop Ad Hoc Committee Formation Request](#)

Mayor Medina introduced the agenda item.

MOTION: I move to sunset, as of December 31, 2019, the Affordable Housing Council Ad Hoc Committee and the Suzuki Council Ad Hoc Committee.

Peltier/Nassar: The motion carried unanimously, 7 – 0.

AYES: Sarah Blossom, Matt Tirman, Joe Deets, Leslie Schneider, Kol Medina, Ron Peltier, Rasham Nassar

NOES: None

ABSENT: None

ABSTAIN: None

12) CONSENT AGENDA

12.A Agenda Bill for Consent Agenda

[Cover Page](#)

12.B Accounts Payable and Payroll

[Cover Page](#)

[Report to Council of Cash Disbursements 12-11-19.pdf](#)

[Payroll.pdf](#)

Accounts Payable: check number 352221 from previous run = \$199.94; ACH check number 364 – 367 = \$1,161,765.38; manual check number sequence 352222 – 352234 = \$75,539.18; regular run check sequence 352235 – 352318 = \$180,954.44. Retainage release number 182 = \$1,050.13. Total disbursement = \$1,418,259.00.

Payroll: normal direct deposit check sequence 46491 – 46620 = \$322,405; regular payroll check sequence 109204 – 109206 = \$ 4,193.69; vendor check run sequence 109207 – 109219 = \$ 331,088.57; Federal Tax Electronic Funds Transfer = \$ 116,044.57; ACH = \$237.50. Total disbursement = \$ 766,972.66.

12.C City Council Study Session Minutes, November 19, 2019

[Cover Page](#)

[City Council Study Session Minutes, November 19, 2019](#)

12.D City Council Regular Business Meeting Minutes, November 26, 2019

[Cover Page](#)

[City Council Business Meeting Minutes, November 26, 2019.pdf](#)

12.E Ordinance No. 2019-39 Extending the Landmark Tree Ordinance, Ordinance No. 2019-17 - Planning

[Cover Page](#)

[Ordinance No. 2019-39 Extending Landmark Tree Regulations Winslow Area](#)

[Exhibit A Work Plan](#)

[Exhibit B Winslow Master Plan Study Area](#)

12.F Point Monroe Street Vacation, portion of, and Consideration of Ordinance No. 2019-34 - Public Works

[Cover Page](#)

[STAFF REPORT Robbins-Newlon Street Vacation - Point Monroe](#)

[Ordinance No. 2019-34 Pt. Monroe Street Vacation - Robbins-Newlon](#)

Street Vacation Application - Pt. Monroe
Pt. Monroe Street Vacation Comments to Date

- 12.G Cultural Funding Advisory Committee 2020-21 Funding Recommendations - Executive**
Cover Page
[Recommendation_for_2020-21_Cultural_Funding_for_CC_11262019-2](#)
- 12.H Ordinance No. 2019-36 Relating to 2019 4th Quarter Budget and Updated Capital Improvement Plan Amendments - Finance**
Cover Page
[Staff 2019 4th QTR Budget Amendments Transmittal Memo.docx](#)
[Ord 2019-36 2019 4th Qtr Budget Amendments](#)
[Ord 2019-36 Attachment A - Q4 Budget Amendments](#)
- 12.I Video Inspection Camera Procurement - Public Works**
Cover Page
[Cues QUOTE.pdf](#)
[Video Camera Bid Form.pdf](#)
[Video Camera Proposed Purchase Order](#)
- 12.J [Pulled from Consent Agenda] Ordinance 2019-24 Updating Bainbridge Island Municipal Code Sections 2.16.040, 2.16.050, 2.16.070, 2.16.110, 18.09.020, 18.09.030, and 18.36.030 Related to Public Participation Meetings for Short Plats, and Decision Criteria for Site Plan and Design Review and Conditional Use Permits - Planning**
Cover Page
[PC Staff Memo re Ord 2019-24](#)
[Ord 2019-24 - Revisions to BIMC 2.16, 18.09, and 18.36](#)
[Exhibit A Title 2 Changes](#)
[Exhibit A Clean](#)
[Exhibit B 18.09 Use Table](#)
[Revised Exhibit C Use Specific Standards](#)
- 12.K Resolution No. 2019-29, Updating the Administrative Manual to Reflect the New Subdivision Standards and the New Design Standards and Guidelines - Planning**
Cover Page
[Resolution No. 2019-29 PCD Administrative Manual Updates for Ord 2019-03 and 2019-25](#)
[Resolution No. 2019-29 Exhibit A Admin Manual Updated - City Council](#)
- 12.L Resolution No. 2019-30 Relating to Clean Fuel Standard Endorsement - Councilmember Peltier**
Cover Page
[Resolution 2019-30 Relating to Clean Fuel Standards](#)
- 12.M [Pulled from Consent Agenda] Old Treatment Plant Pump Station Replacement Project Final Change Order- Public Works**
Cover Page
[OTP Final Change Order](#)
[OTP Worksheet.pdf](#)

MOTION: I move to approve the Consent Agenda, as amended.

Nassar/Peltier: The motion was approved by unanimous consent.

13) COMMITTEE REPORTS

13.A Committee Reports

Cover Page

Race Equity Task Force Meeting Minutes, November 7, 2019

Councilmember Peltier reported on the Puget Sound Growth Management Board.

14) FOR THE GOOD OF THE ORDER

Councilmember Deets proposed year-end Council gathering on Monday, December 16, 2019 from 5:00 to 7:00 p.m.

15) ADJOURNMENT

Mayor Medina adjourned the meeting at 10:09 p.m.

Leslie Schneider, Mayor

Christine Brown, CMC, City Clerk



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: Sustainable Transportation Professional Services Agreement Award and Budget Amendment - Public Works

SUMMARY: Following the presentation from City Staff and Consultant Nelson/Nygaard during the November 19, 2019 Study Session, City staff recommends moving forward with the award of the professional services agreement for the Sustainable Transportation Plan.

AGENDA CATEGORY: Contract

PROPOSED BY: Public Works

RECOMMENDED MOTION: Approve with Consent Agenda

STRATEGIC PRIORITY: Reliable Infrastructure and Connected Mobility

FISCAL IMPACT:

Amount:	\$268,000.00
Ongoing Cost:	
One-Time Cost:	\$268,000.00
Included in Current Budget?	No

BACKGROUND: On January 22, 2019, the Council reviewed the final form of a document developed by Councilmembers to describe a Sustainable Transportation project and directed staff to prepare a Request for Qualifications (RFQ) based on the activities identified in the Sustainable Transportation Proposal.

During several Council discussions in March 2019, the RFQ and selection process were discussed and modified. The City Council approved an RFQ on March 26, 2019. The RFQ was advertised in early April 2019 and three firms – Alta, Toole, and Nelson/Nygaard - submitted their qualifications. All three firms were interviewed on May 15, 2019, and Nelson/Nygaard was selected as the most qualified consultant for this project.

On June 18, 2019, Staff and Nelson/Nygaard prepared a preliminary scope and budget, based on the tasks identified in the RFQ, for discussion with Council. The Council directed staff to perform “best practices” research and create a new scope of work to evaluate and achieve the desired outcomes of the Sustainable Transportation Proposal.

At the July 9, 2019 Business Meeting, the City Council approved a "scoping scope of work" for consultant Nelson/Nygaard to conduct best practices research and prepare a revised scope of work for the ensuing Sustainable Transportation project.

At the August 6, 2019 Study Session, Consultant Nelson/Nygaard led a City Council discussion about setting goals for the Sustainable Transportation Plan.

At the November 19, 2019 Study Session, City staff and Consultant Nelson/Nygaard presented to City Council results from their best practices research and a Scope, Schedule, and Budget for the Sustainable Transportation Plan. Council made no changes to the Scope of Work but requested additional meetings to update Council on project progress. The revised project budget of \$268,000 reflects additional time necessary for the Consultant to attend Council meetings for the anticipated project duration.

The proposed work will be completed in two phases generally, with the first phase consisting of developing and implementing a community engagement plan to confirm goals and a prioritization framework. The second phase will consist generally of gap analyses of the existing transportation infrastructure and transportation options, development of proposed projects and policies to further community goals, and development of implementation scenarios.

City staff recommends approval of the professional services agreement with Nelson/Nygaard and budget amendment for the Sustainable Transportation Plan.

Upon Council approval, a budget amendment in the amount of \$134,000.00 will be included in the next quarter budget adjustment reporting.

ATTACHMENTS:

[Professional Services Agreement - Nelson Nygaard](#)

FISCAL DETAILS: The 2019-2020 biennial budget included \$150,000 for this item under Non-Motorized Transportation planning in the Streets Fund. The current phase has expended approximately \$16,000, leaving a balance of \$134,000. To support the project cost of \$268,000, a budget amendment in the amount of an additional \$134,000 would be needed for this project in its presented form.

At the Nov. 19 meeting, City Council indicated support for the use of Council Contingency funds for this additional funding.

The Council has previously approved total spending of \$10,300 from 2019 Council contingency funds, leaving available Council contingency funds of \$289,700 (per the 2019 Approved Budget of \$300,000).

This item proposes to use \$134,000 of these remaining funds, leaving a balance in 2019 Council contingency of \$155,700.

Fund Name(s): Streets Fund

Coding:

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT FOR PROFESSIONAL SERVICES (“Agreement”) is entered into between the City of Bainbridge Island, a Washington State municipal corporation, (“City”) and Nelson\Nygaard Consulting Associates, Inc., a California State corporation (“Consultant”).

WHEREAS, the City needs professional services in connection with preparing sustainable transportation planning; and

WHEREAS, the Consultant has the expertise and experience to provide said services and is willing to do so in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, conditions, promises, and agreements set forth herein, it is agreed by and between the City and the Consultant as follows:

1. SERVICES BY CONSULTANT

The Consultant shall provide the professional services as defined in this Agreement and as necessary to accomplish the scope of services attached hereto as **Attachment A** and incorporated herein by this reference as if set forth in full. The Consultant shall furnish all services, labor, and related equipment to conduct and complete the work, except as specifically noted otherwise in this Agreement.

2. TERM AND TERMINATION OF AGREEMENT

A. This Agreement shall become effective upon execution by both parties and shall continue in full force and effect until **February 28, 2021**, unless sooner terminated by either party as provided below.

B. This Agreement may be terminated by either party without cause upon thirty (30) days’ written notice to the other party. In the event of termination, all finished or unfinished documents, reports, or other material or work of the Consultant pursuant to this Agreement shall be submitted to the City, and the Consultant shall be entitled to just and equitable compensation at the rate set forth in Section 3 for any satisfactory work completed prior to the date of termination.

3. PAYMENT

A. The City shall pay the Consultant for such services:

Hourly, plus actual expenses, in accordance with **Attachment A**, but not more than a total of two hundred sixty-eight thousand dollars (\$268,000.00);

Fixed Sum: a total amount of \$_____;

Other: \$_____, for all services performed and incurred under this Agreement, to be billed monthly in equal amounts.

B. The Consultant shall submit, in a format acceptable to the City, monthly invoices for services performed in a previous calendar month. Each project shall be the subject of a separate invoice. Invoices shall show task level detail. The Consultant shall maintain time and expense records and provide them to the City upon request.

C. The City shall pay all invoices by mailing a City check within sixty (60) days of receipt of a proper invoice from the Consultant.

D. If the services rendered do not meet the requirements of this Agreement, the Consultant shall correct or modify the work to comply with this Agreement. The City may withhold payment for such work until it meets the requirements of this Agreement.

4. INSPECTION AND AUDIT

The Consultant shall maintain all books, records, documents, and other evidence pertaining to the costs and expenses allowable under this Agreement in accordance with generally accepted accounting practices. All such books and records required to be maintained by this Agreement shall be subject to inspection and audit by representatives of the City and/or the Washington State Auditor at all reasonable times, and the Consultant shall afford the proper facilities for such inspection and audit. Representatives of the City and/or the Washington State Auditor may copy such books, accounts, and records if necessary to conduct or document an audit. The Consultant shall preserve and make available all such books of account and records for a period of three (3) years after final payment under this Agreement. In the event that any audit or inspection identifies any discrepancy in such financial records, the Consultant shall provide the City with appropriate clarification and/or financial adjustments within thirty (30) calendar days of notification of the discrepancy.

5. INDEPENDENT CONTRACTOR

A. The Consultant and the City understand and expressly agree that the Consultant is an independent contractor in the performance of each and every part of this Agreement. The Consultant expressly represents, warrants, and agrees that the Consultant's status as an independent contractor in the performance of the work and services required under this Agreement is consistent with and meets the six-part independent contractor test set forth in RCW 51.08.195. The Consultant, as an independent contractor, assumes the entire responsibility for carrying out and accomplishing the services required under this Agreement. The Consultant shall make no claim of City employment nor shall the Consultant claim any related employment benefits, social security, and/or retirement benefits.

B. The Consultant shall be solely responsible for paying all taxes, deductions, and assessments, including but not limited to federal income tax, FICA, social security tax, assessments for unemployment and industrial injury, and other deductions from income which may be required by law or assessed against either party as a result of this Agreement. In the event the City is assessed a tax or assessment as a result of this Agreement, the Consultant shall pay the same before it becomes due.

C. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

D. The Consultant shall obtain a business license and, if applicable, pay business and occupation taxes pursuant to Title 5 of the Bainbridge Island Municipal Code.

6. NONDISCRIMINATION AND COMPLIANCE WITH LAWS

A. The Consultant agrees not to discriminate against any employee or applicant for employment or any other person in the performance of this Agreement because of race, creed, color, national origin, marital status, sex, sexual orientation, age, disability, or other circumstance prohibited by federal, state, or local law or ordinance, except for a bona fide occupational qualification.

B. The Consultant shall comply with all federal, state, and local laws and ordinances applicable to the work to be done under this Agreement.

C. Violation of this Section 6 shall be a material breach of this Agreement and grounds for cancellation, termination, or suspension by the City, in whole or in part, and may result in ineligibility for further work for the City.

7. OWNERSHIP OF WORK PRODUCT

All data, materials, reports, memoranda, and other documents developed under this Agreement, whether finished or not, shall become the property of the City and shall be forwarded to the City in hard copy and in digital format that is compatible with the City's computer software programs.

8. GENERAL ADMINISTRATION AND MANAGEMENT

The City Manager of the City, or designee, shall be the City's representative, and shall oversee and approve all services to be performed, coordinate all communications, and review and approve all invoices, under this Agreement.

9. HOLD HARMLESS AND INDEMNIFICATION

A. The Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of or resulting from the acts, errors, or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

B. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend hereunder, shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided

herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

C. The City's inspection or acceptance of any of the Consultant's work when completed shall not be grounds to void, nullify, and/or invalidate any of these covenants of indemnification.

D. Nothing contained in this Agreement shall be construed to create a liability or a right of indemnification in any third party.

10. INSURANCE

The Consultant shall maintain insurance as follows:

- Commercial General Liability as described in **Attachment B**.
- Professional Liability as described in **Attachment B**.
- Automobile Liability as described in **Attachment B**.
- Workers' Compensation as described in **Attachment B**.
- None.

11. SUBLETTING OR ASSIGNING CONTRACT

This Agreement, or any interest herein or claim hereunder, shall not be assigned or transferred in whole or in part by the Consultant to any other person or entity without the prior written consent of the City. In the event that such prior written consent to an assignment is granted, then the assignee shall assume all duties, obligations, and liabilities of the Consultant as stated herein.

12. EXTENT OF AGREEMENT/MODIFICATION

This Agreement, together with attachments or addenda, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended, modified, or added to only by written instrument properly signed by both parties.

13. SEVERABILITY

A. If a court of competent jurisdiction holds any part, term, or provision of this Agreement to be illegal or invalid, in whole or in part, the validity of the remaining provisions shall not be affected, and the parties' rights and obligations shall be construed and enforced as if the Agreement did not contain the particular provision held to be invalid.

B. If any provision of this Agreement is in direct conflict with any statutory provision of the State of Washington, that provision which may conflict shall be deemed inoperative and null and void insofar as it may conflict, and shall be deemed modified to conform to such statutory provision.

14. FAIR MEANING

The terms of this Agreement shall be given their fair meaning and shall not be construed in favor of or against either party hereto because of authorship. This Agreement shall be deemed to have been drafted by both of the parties.

15. NONWAIVER

A waiver by either party hereto of a breach by the other party hereto of any covenant or condition of this Agreement shall not impair the right of the party not in default to avail itself of any subsequent breach thereof. Leniency, delay, or failure of either party to insist upon strict performance of any agreement, covenant, or condition of this Agreement, or to exercise any right herein given in any one or more instances, shall not be construed as a waiver or relinquishment of any such agreement, covenant, condition, or right.

16. NOTICES

Unless stated otherwise herein, all notices and demands shall be in writing and sent or hand-delivered to the parties at their addresses as follows:

To the City: City of Bainbridge Island
 280 Madison Avenue North
 Bainbridge Island, WA 98110
 Attention: City Manager

To the Consultant: Nelson\Nygaard Consulting Associates, Inc.
 2 Bryant Street, Suite 300
 San Francisco, CA 94105
 Attention: Managing Director

or to such addresses as the parties may hereafter designate in writing. Notices and/or demands shall be sent by registered or certified mail, postage prepaid, or hand-delivered. Such notices shall be deemed effective when mailed or hand-delivered at the addresses specified above.

17. SURVIVAL

Any provision of this Agreement which imposes an obligation after termination or expiration of this Agreement shall survive the term or expiration of this Agreement and shall be binding on the parties to this Agreement.

18. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

19. VENUE

The venue for any action to enforce or interpret this Agreement shall lie in the Superior Court of Washington for Kitsap County, Washington.

20. COUNTERPARTS

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the later of the signature dates included below.

NELSONNYGAARD
CONSULTING ASSOCIATES, INC.

CITY OF BAINBRIDGE ISLAND

Date: _____

Date: _____

By: _____

By: _____

Name _____

Morgan Smith, City Manager

Title _____

Tax I.D. # _____

City Bus. Lic. # _____

ATTACHMENT A SCOPE OF SERVICES

SCOPE OF WORK

Bainbridge Island Sustainable Transportation Planning

November 21, 2019

Definitions:

- *City* – City of Bainbridge Island Project Manager
- *Consultant* – Nelson\Nygaard and EnviroIssues
- *PTAT* – Project Technical Advisory Team (internal City of Bainbridge Island staff)
- *PAC* – Project Advisory Committee

TASK 1 PROJECT KICKOFF, MEETINGS, AND ONGOING MANAGEMENT

Task 1.1 Project Kickoff

A project kickoff meeting will be held with the Consultant team and the City of Bainbridge Island Project Technical Advisory Team (PTAT) to discuss goals, expectations, key issues, and communications protocols to ensure a smooth project from start to finish. Specific tasks to be included in this meeting are the following:

- Discuss project goals, potential obstacles, logistics, and key decision makers
- Finalize the project timeline
- Establish roles, communication protocols, and expectations; discuss invoice requirements
- Confirm plans and future projects for review (Task 4.1)
- Discuss available sources of data for existing conditions analysis; begin a discussion of network criteria and remaining data needs
- Identify key stakeholders and composition of Project Advisory Committee (PAC)
- Discuss the public engagement strategy and outreach formats, schedule, and key events for inclusion in the Engagement Plan (Task 2.1); identify social media strategies and existing outlets

Task 1.2 Bi-Weekly Calls and Ongoing Project Management

The Consultant team will work with the PTAT to set up standing 45-minute calls every other week. On each call, the Consultant will discuss current project work, upcoming tasks, or deliverable review. The Consultant PM and the City PM will maintain regular contact throughout the project to ensure day-to-day management is smooth and coordinated. The Consultant will submit monthly invoices and progress reports throughout the project.

Task 1.3 City Council Meetings

The Consultant team and the City PM will provide quarterly updates to City Council at key project milestones. The project team anticipates engaging the Council shortly after project kickoff to inform development of the engagement strategy, confirm project goals, and advise on development of objectives, performance measures, and potential evaluation criteria (Task 3). The second check-in will follow the review of existing plans and completion of the gap analysis, and the third will occur after initial evaluation and project prioritization to inform scenario development (Task 6.1). The final Council meeting will involve review of costs, funding, phasing, and the implementation plan (Task 7.2) to inform development of the near-term action plan (Task 8). Up to eight additional meetings with Council are budgeted for monthly updates.

City Deliverables:

- Planning for kickoff meeting; provide kickoff meeting space
- Scheduling, coordination, and submittal of materials for City Council meetings

Consultant Deliverables:

- Kickoff summary notes with decisions made, project schedule, and data requested
- Bi-weekly call agendas and summary notes (assuming a 12-month project duration)
- Monthly invoices and progress reports
- Presentations and materials for up to twelve (12) City Council meetings

TASK 2 COMMUNITY OUTREACH AND ENGAGEMENT

Task 2.1 Develop Engagement Plan

The success of the Sustainable Transportation Plan will hinge on inclusive community engagement and consensus. The Consultant will integrate public and stakeholder participation throughout the planning process to ensure that the project reflects the shared values, needs, and priorities of the community. Shortly after the project kickoff meeting, our team will finalize the community engagement plan that details:

- Outreach objectives
- Key messages and communication strategies
- Potential stakeholders
- Proposed outreach event locations, dates, and times

We anticipate working with the City of Bainbridge Island to finalize the Engagement Plan. We will use a variety of approaches to connect with residents and stakeholders.

Task 2.2 Advisory Committee Meetings

The City Project Manager and PTAT will invite and appoint a PAC to guide development of the Sustainable Transportation Plan and ensure that the project benefits from strong support, feedback, and stewardship throughout the planning and implementation process. The PAC will meet no more than six (6) times throughout the duration of the project. The committee will be comprised of community members and stakeholders with a focus on including underrepresented groups such as youth, older adults, people with disabilities, and low-income populations on Bainbridge Island as well as inter-agency stakeholders, including Kitsap Transit, WSDOT, and

Washington State Ferries. Committee meetings will be designed to solicit information that responds to core questions and to allow open-ended conversation.

Task 2.3 Engagement 1: Sustainable Transportation Goal Confirmation, Needs, and Priorities

Phase 1 engagement will focus on confirming plan goals and gathering community feedback on the top mobility priorities for the Sustainable Transportation Plan. This input will inform the development of plan objectives and evaluation criteria to flesh out plan goals. Understanding what goals tangibly mean to community members and how investments can improve their day-to-day mobility experiences will inform how investments are prioritized through the plan.

Engagement will be proactively inclusive, employing targeted strategies to gather feedback from voices typically underrepresented in planning processes, such as youth, older adults, people with disabilities, and low-income populations.

Phase 1 engagement includes the following strategies:

- One (1) community open house to kick-off the project
- Online open house and survey following the in-person open house
- Three (3) pop-up engagement events at pre-existing community events focused on reaching traditionally underrepresented communities
- Outreach-in-a-box for stakeholder and community organizations to engage their member networks on sustainable transportation values and priorities
- Associated engagement materials development, including project information for posting on City-hosted project website

Task 2.4 Engagement 2: Feedback on Priority Projects, Programs, and Policy Packages

Following initial project and program prioritization (Task 6), the Consultant team in partnership with the PTAT and PAC will conduct a second round of engagement to gather feedback on initial prioritization results. Evaluation results will be presented as packages of goal-focused, high-priority projects, programs, and policies, with the mix of investments maximizing benefit to achieve plan goals.

The intent of the second phase of engagement is to confirm whether the mix of priority projects, programs, and policies accurately reflect and advance the community’s top mobility needs. This round of engagement will also gather feedback on the timing and phasing of investments (e.g., What do we invest in first with limited resources?).

Through PAC feedback, and both digital/online and limited in-person engagement, the Consultant will design and administer a trade-off exercise where participants must choose how to spend a limited amount of money in the first five years to implement plan priorities and advance the Island’s sustainable transportation goals.

Figure 1 Example of engagement materials for feedback on objectives and performance measures (North Downtown Mobility Action Plan)



Figure 2 Sample engagement materials depicting project scoring based on plan goals (North Downtown Mobility Action Plan)



Phase 2 engagement includes the following strategies:

- One (1) open house—co-hosted by the PAC and Council—to engage in a trade-off exercise
- Online open house and survey to replicate trade-off exercise and pop-up questions
- Three (3) pop-up engagement events at pre-existing community events focused on reaching traditionally underrepresented communities
- Outreach-in-a-box for stakeholder and community organizations to engage their member networks on prioritized investments
- Associated engagement materials development, including project information for posting on City-hosted project website

Task 2.5 Engagement Summary

The Consultant will summarize the community feedback received throughout the project in a brief memo. The memo will include the compilation of feedback received during in-person engagement, online survey responses, and feedback from outreach-in-a-box engagement led by stakeholders. Engagement results and feedback will be also be featured prominently in the Near-Term Action Plan (Task 8).

City Deliverables:

- Invitations, coordination, and scheduling with PAC members
- Space reservations and logistics support for open house and engagement events
- Staffing for events and meetings
- City website for project

Consultant Deliverables:

- Community engagement plan
- Event plan, presentation, activities, supporting materials, and staffing for open houses
- Supporting materials and staffing for three pop-up engagement events at pre-existing community events

- Outreach-in-a-Box kit
- Online open house and surveys
- Engagement Summary Memo

TASK 3 GOALS AND EVALUATION FRAMEWORK

Task 3.1 Confirm Vision, Goals, and Performance Measures

Building upon the Council-established goals for the Sustainable Transportation Plan (see draft goals below), the Consultant will work with the City Project Manager, PTAT, and PAC to identify a preliminary set of objectives and performance measures to operationalize the goals. The vision and goals will serve as a foundation for the development of the Sustainable Transportation Plan. The development of the objectives and performance measures will be supported by a community engagement effort to understand what these goals mean to members of the Bainbridge Island community (Task 2.3).

- Goal 1: Present a unifying vision for the future of transportation on Bainbridge Island
- Goal 2: Create a holistic, inclusive definition of sustainable mobility with a suite of practical solutions
- Goal 3: Integrate the island’s transportation and land use visions
- Goal 4: Complete missing links and make first/last mile connections
- Goal 5: Build a toolbox of facility types and solutions tailored to people of all ages and abilities and the island’s unique contexts
- Goal 6: Demonstrate transparent decision-making based on community values, with a clear link to implementation planning, investments, and subsequent funding requests

Task 3.2 Evaluation and Prioritization Framework

The Consultant will integrate community feedback on mobility needs and priorities as well as the plan objectives and performance measures into a weighted project prioritization framework to screen projects. Evaluation criteria will be established for each plan goal to elevate investments that deliver the highest value in advancing the Sustainable Transportation Plan vision. Evaluation criteria weighting will be consistent with community priorities and top needs expressed during Phase 1 engagement, and the PAC will advise on the final weighting of project prioritization framework.

Consultant Deliverables:

- Goals, Objectives, and Performance Measures memo
- Evaluation and Prioritization Framework memo

TASK 4 INVENTORY OF EXISTING CONDITIONS, PROJECTS, AND GAPS

Task 4.1 Existing Plans and Future Projects Review

To build upon the extensive planning work done by the City and Bainbridge Island community members, the Consultant will review existing plans and studies. The focus will be on identified/planned projects, unmet mobility needs, and existing conditions, including island-wide travel patterns, current/planned networks and facilities, multimodal performance and use metrics, and current/future land use characteristics. The Consultant will

assemble a cohesive, comprehensive inventory of plans completed and projects identified, supplemented by an assembly of existing conditions. This inventory of plans and projects will be analyzed and prioritized in the following tasks.

Existing plans and studies for review include:

- Island-wide Transportation Plan (ITWP) (2017)
- Climate Action Plan (CAP)
- Olympic Drive Non-Motorized Improvements Project (2014 and under construction in 2019)
- Bainbridge Island Comprehensive Plan (2017)
- Kitsap Transit Comprehensive Route Analysis (2019)
- SR 305 Safety Improvements Project (ongoing)
- Existing bicycle, pedestrian, and paved trail facilities
- Programmed and planned bicycle, pedestrian, and paved trail facilities
- Recent and future land use planning efforts

Task 4.2 *Gap Analysis*

The Consultant will analyze the comprehensive inventory of planned networks and projects identified in previous planning efforts based on their alignment with Sustainable Transportation Plan goals and objectives to reveal any gaps where existing plans and projects do not address priority needs and goals. Based on the priorities expressed by the community during Phase 1 engagement and solidified in the evaluation framework (Task 3.2), the Consultant will work the PTAT to determine supplementary analyses necessary to identify projects to fill gaps and address plan goals.

Supplementary analyses could include approximately three (3) of the following (up to a not-to-exceed budget amount as indicated in the attached budget):

- Equity analysis to understand where low-income populations, youth and older adults, and communities of color may experience mobility barriers or disproportionate burden
- Systemic safety analysis: collision patterns and analysis of roadway factors commonly present in collisions involving people walking and bicycling
- Analysis of travel patterns and commute trips by mode
- Travel demand index based on current and future land use analysis
- First/last mile connections to transit
- Transit ridership, travel sheds, and new mobility opportunities
- Bicycle level of traffic stress, pedestrian level of comfort

Task 4.3 *Project Identification*

Informed by the supplementary analyses, the Consultant will identify additional projects or areas of investment to address gaps and advance plan goals. Potential new projects will be reviewed and vetted with both the PTAT and PAC.

City Deliverables:

- [Assembly and transmittal of all plans and projects for Consultant review](#)

- Other data needs as requested

Consultant Deliverables:

- Comprehensive matrix/database of plans and projects identified to date
- Gap analysis memo documenting initial findings on planned networks and project alignment with Sustainable Transportation Plan goals
- Supplementary analysis to identify investments to fill gaps
- Updated matrix/database of projects for screening and evaluation

TASK 5 PROGRAMS AND POLICIES

Task 5.1 Supportive Programs and Policies

In addition to the projects and network investments identified in previous plans and the new projects identified during the Gap Analysis, the Consultant will assemble a list of supportive programs and policies to meet plan goals and address mobility needs and priorities expressed during community feedback. Programmatic investments will be included in initial project prioritization to gauge alignment and return on investment in advancing plan goals. Potential programs and policies for the Sustainable Transportation Plan could include:

- Vision Zero policy and supportive programs
- Safe Routes to School program
- Safety education and encouragement programs
- Parking pricing, residential parking permit program, and/or elimination of parking minimums
- Multimodal level of service, transportation impact fees, and concurrency policy assessment and revision recommendations
- Transportation demand management program
- Transit investments including speed and reliability improvements, first/last mile transit access program, and formal partnerships with local transit agencies for implementation

Consultant Deliverables:

- Supportive Programs and Policies memo aligned with community feedback and plan goals

TASK 6 PRIORITIZATION AND SCENARIO DEVELOPMENT

Task 6.1 Evaluation and Prioritization of Projects, Programs, and Policies

The Consultant will use the evaluation framework developed in Task 3 to score each project, program, and policy identified from previous plans (Task 4.1) and through the gap analysis and project identification (Tasks 4.2 and 4.3). The scores will be reported in tiers—rather than as absolutes—to help PTAT and PAC understand which investments can help to make the most progress toward specific goals. The results of this evaluation will be used to create goal-focused scenarios.

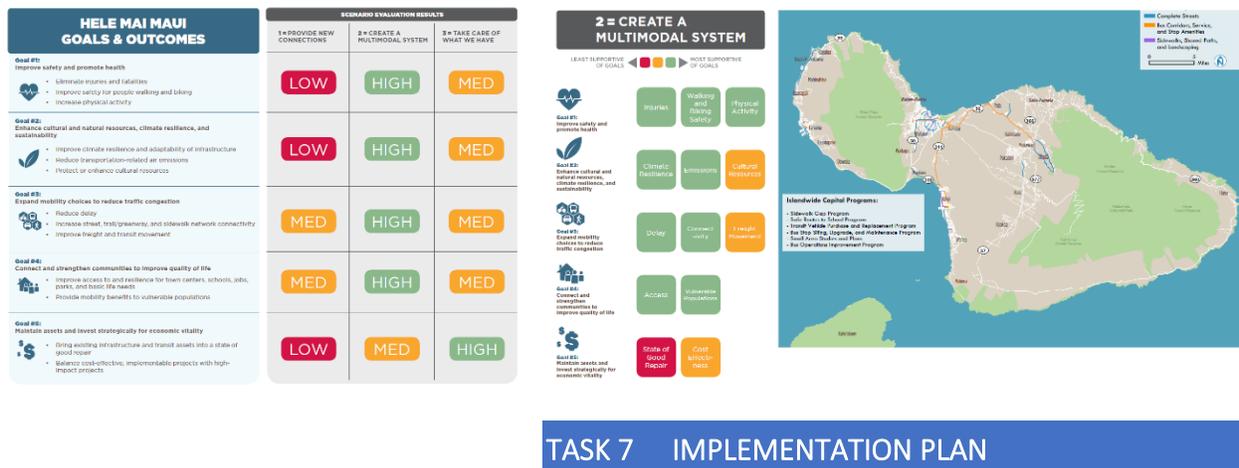
Task 6.2 Develop Scenarios

The Consultant will develop three scenarios, focused on different plan goals and maximizing different types of investments, to convey the opportunities presented in the Sustainable Transportation Plan. These three scenarios will be distinct in scale and approach and will form the basis of Phase 2 engagement. The intention of depicting a mix of investments as scenarios is to frame a community conversation about trade-offs and using investments to emphasize priorities. Each scenario will include a mix of projects, programs, and policies and will be communicated graphically with maps and icons to support public review (see Figure 3).

Consultant Deliverables:

- Matrix of project and program evaluation scores by tier
- Draft and final memo with descriptions and supporting graphics for three (3) scenarios

Figure 3 Example of scenarios depicting mixes of investments with different emphases on plan goals (Hele Mai Maui Long-Range Transportation Plan)



TASK 7 IMPLEMENTATION PLAN

Task 7.1 Final Package of Priority Investments

Following Phase 2 engagement, the Consultant will work with the PTAT and PAC to assemble the final package of priority investments. This final package will likely be a hybrid of the three scenarios developed in Task 6.2. Changes between the initial project prioritization and scenarios and the final package will be documented as part of the Sustainable Transportation Plan.

Task 7.2 Costs, Funding, Phasing, and Implementation Plan

Planning-level costs will be developed for the final priority package of projects, programs, and policies to inform the implementation plan and phasing. The Consultant will work with the PTAT to establish a realistic amount of financial and human resources to inform the timeframe and amount of investment per year for the implementation plan. The Consultant will inventory potential implementation partners and local, state, federal and grant-based funding sources to support Sustainable Transportation Plan implementation.

City Deliverables:

- Identification of available resources

Consultant Deliverables:

- Final package of priority investments per plan goal with planning-level costs

- Implementation Plan memo with funding, phasing, and partnerships

TASK 8 NEAR-TERM ACTION PLAN

Task 8.1 ***Near-Term Action Plan***

The Consultant will create a highly visual public-facing Near-Term Action Plan detailing the first five years of Sustainable Transportation Plan implementation. This document will function as a robust executive summary and vision document rather than as a comprehensive master plan. All deliverables from previous tasks will be available to the public as supporting appendices.

The Near-Term Action Plan will visually depict the plan development process, including documenting community feedback received along the way. Central to the Near-Term Action Plan will be the highest priority investments that are needed to make the most progress toward plan goals in the first five years.

In collaboration with PTAT and the PAC, the Consultant will select one priority project, program, and policy (three highlights total) to develop and depict in further detail in the Near-Term Action Plan as marquee investments.

City Deliverables:

- Identification of highest-priority project, program, and policy as features in Near-Term Action Plan
- One set of non-conflicting comments on the draft Near-Term Action Plan

Consultant Deliverables:

- Draft and final Near-Term Action Plan (no more than 20 pages/10 spreads of highly graphic content) with detailed highest-priority investments (three total)

Task Description	Nelson\Nygaard Labor Costs							Subconsultant Costs							Total Labor Hours	Total Labor Costs	Total Direct Expenses	Total Costs			
	Total Billing Rate	Jennifer Wieland	Lauren Squires	Brendan Rahman	Briana Weisgerber	Associate 1	Drusilla van Hengel	Hours	NN Labor Cost	Envirolsues									Hours	Cost	
		Principal 5	Associate 2	Associate 2	Associate Engineer 1	Associate 1	Principal 6			Susan Hayman	Envirolsues Labor			Envirolsues Labor Cost							
		\$250.00	\$130.00	\$130.00	\$115.00	\$100.00	\$270.00			Sr Associate	Associate 2	Project Coord	Designer								Online Systems
\$204.00	\$112.00	\$88.00	\$158.00	\$158.00																	
1 Project Kickoff, Meetings, and Ongoing Management																					
1.1 Project Kickoff		6	6			6	2	20	\$3,420		6				6	\$1,224	26	\$4,644	\$24	\$4,668	
1.2 Biweekly Calls & Ongoing Project Management		30	42			12	12	102	\$17,160		20	24			44	\$6,768	146	\$23,928		\$23,928	
1.3 City Council Meetings (12)		48	48				12	156	\$26,280		8				8	\$1,632	164	\$27,912	\$100	\$28,012	
Task Total		84	96	0	12	66	20	278	\$46,860		34	24	0	0	58	\$9,624	336	\$56,484	\$124	\$56,608	
2 Community Outreach and Engagement																					
2.1 Develop Engagement Plan		2	4					6	\$1,020		4	12			16	\$2,160	22	\$3,180		\$3,180	
2.2 Stakeholder Task Force (6)		24	16			30	6	76	\$12,700		12	6	48		66	\$7,344	142	\$20,044	\$400	\$20,444	
2.3 Engagement 1: Goal Confirmation, Needs, and Priorities																					
2.31 Community Open House (1)		8	16	16		16		56	\$7,760		8	16	24		48	\$5,536	104	\$13,296	\$800	\$14,096	
2.32 Online Open House + Survey (1)		2	4	2		8		16	\$2,080		4	16		6	42	\$5,112	84	\$10,192		\$10,192	
2.33 Pop-Up Engagement (3)			4	4	4	8		16	\$1,840		2	24	36		62	\$6,264	78	\$8,104	\$700	\$8,804	
2.34 Outreach-in-a-Box Kit and Engagement Materials		2	4	8		8		22	\$2,860		4	12			16	\$2,160	38	\$5,020	\$300	\$5,320	
2.4 Engagement 2: Feedback on Priority Projects, Programs, and Policy Packages																					
2.41 Community Open House (1)		8	16	16		16		56	\$7,760		8	16	24		48	\$5,536	104	\$13,296	\$800	\$14,096	
2.42 Online Open House + Survey (1)		2	4	2		8		16	\$2,080		4	16		6	42	\$5,112	84	\$10,192		\$10,192	
2.43 Pop-Up Engagement (3)			4	4	4	8		16	\$1,840		2	24	36		62	\$6,264	78	\$8,104	\$700	\$8,804	
2.44 Outreach-in-a-Box Kit and Engagement Materials		2	4	10		8		24	\$3,120		4	12			16	\$2,160	40	\$5,280	\$300	\$5,580	
2.5 Engagement Summary			4	6		8		20	\$2,600		4	8	16		28	\$3,120	48	\$5,720		\$5,720	
Task Total		50	76	68	0	118	6	318	\$44,640		52	150	184	12	84	\$8,768	800	\$103,408	\$4,000	\$107,408	
3 Goals and Evaluation Framework																					
3.1 Confirm Vision, Goals, and Performance Measures		8	12	2		24	2	48	\$6,760						0	\$0	48	\$6,760		\$6,760	
3.2 Evaluation and Prioritization Framework		4	8			8	2	54	\$6,700						0	\$0	54	\$6,700		\$6,700	
Task Total		12	20	2		8	4	102	\$13,460		0	0	0	0	0	\$0	102	\$13,460	\$0	\$13,460	
4 Inventory of Existing Conditions, Projects, and Gaps																					
4.1 Existing Plans and Future Projects Review		4	8		16	40	2	70	\$8,420		4				4	\$816	74	\$9,236		\$9,236	
4.2 Gap Analysis		8	16	4	32	80	6	146	\$17,900						0	\$0	146	\$17,900		\$17,900	
4.3 Project Identification		4	12		20	20	2	58	\$7,400						0	\$0	58	\$7,400		\$7,400	
Task Total		16	36	4	68	140	10	274	\$33,720		4	0	0	0	4	\$816	278	\$34,536	\$0	\$34,536	
5 Programs and Policies																					
5.1 Supportive Programs and Policies		4	8			40	2	54	\$6,580		2				2	\$408	56	\$6,988		\$6,988	
Task Total		4	8	0	0	40	2	54	\$6,580		2	0	0	0	2	\$408	56	\$6,988	\$0	\$6,988	
6 Prioritization and Scenario Development																					
6.1 Evaluation and Prioritization of Projects, Programs, and Policies		4	12		16	40	2	74	\$8,940						0	\$0	74	\$8,940		\$8,940	
6.2 Develop Scenarios		6	8	12		24	2	52	\$7,040		2				2	\$408	52	\$7,040		\$7,040	
Task Total		10	20	12	16	64	4	126	\$15,980		2	0	0	0	2	\$408	128	\$16,388	\$0	\$16,388	
7 Implementation Plan																					
7.1 Final Package of Priority Investments		2	4	4		12		22	\$2,740		2				2	\$408	22	\$2,740		\$2,740	
7.2 Costs, Funding, Phasing, and Implementation Plan		4	8	12	32	40	4	100	\$12,360		2				2	\$408	100	\$12,360		\$12,360	
Task Total		6	12	16	32	52	4	122	\$15,100		4	0	0	0	4	\$816	128	\$15,916	\$0	\$15,916	
8 Near-Term Action Plan																					
8.1 Near-Term Action Plan		8	12	40	16	40	4	120	\$15,680		4				4	\$816	124	\$16,496	\$200	\$16,696	
Task Total		8	12	40	16	40	4	120	\$15,680		4	0	0	0	4	\$816	124	\$16,496	\$200	\$16,696	
TOTAL HOURS		190	280	142	152	576	54	1,394		102	174	184	12	84	556		1,950				
TOTAL LABOR COST		\$47,500	\$36,400	\$18,460	\$17,480	\$57,600		\$14,580		\$192,020	\$20,808	\$19,488	\$16,192	\$1,896	\$13,272		\$71,656		\$263,676	\$4,324	\$268,000
SUBCONSULTANT MARKUP																			\$0	\$0	
TOTAL COSTS																\$71,656			\$0	\$268,000	

**ATTACHMENT B
INSURANCE REQUIREMENTS**

A. Insurance Term

The Consultant shall procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

B. No Limitation

The Consultant's maintenance of insurance as required by the Agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

C. Minimum Scope of Insurance

The Consultant shall obtain insurance of the types and coverage described below:

1. Automobile Liability insurance covering all owned, non-owned, hired, and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. The City shall be named as an additional insured under Consultant's Automobile Liability policy.
2. Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors, and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City using an additional insured endorsement at least as broad as ISO CG 20 26.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Professional Liability insurance appropriate to the Consultant's profession.

D. Minimum Amounts of Insurance

The Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.

2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate and \$2,000,000 Products/Completed Operations Aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit, as applicable.

E. Other Insurance Provision

The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain, that they shall be primary insurance as respect to the City. Any insurance, self-insurance, or self-insured pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

F. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

G. Verification of Coverage

Before commencing work and services, the Consultant shall provide to the person identified in Section 8 of the Agreement a Certificate of Insurance evidencing the required insurance. The Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work. The City reserves the right to request and receive a certified copy of all required insurance policies, except for Professional Liability insurance. However, in the event of a claim, the Consultant shall provide a certified copy of the required Professional Liability insurance policy to the City.

H. Notice of Cancellation

The Consultant shall provide the City with written notice of any policy cancellation within two business days of their receipt of such notice.

I. Failure to Maintain Insurance

Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five (5) business days' notice to the Consultant to correct the breach, immediately terminate this Agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

J. City Full Availability of Consultant Limits

If the Consultant maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella

liability maintained by the Consultant, irrespective of whether such limits maintained by the Consultant are greater than those required by this Agreement or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Consultant.



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 10 Minutes

AGENDA ITEM: Memorandum of Understanding with Seattle Police Department Regarding Agency Participation in the Internet Crimes Against Children (ICAC) Multi-Jurisdictional Task Force - Police

SUMMARY: The Bainbridge Island Police Department wishes to become an “Affiliate Agency” of the Internet Crimes Against Children Task Force in order to expand available resources, increase training, and enhance the ability to successfully investigate Internet crimes against children.

AGENDA CATEGORY: Interlocal Agreement **PROPOSED BY:** Police

RECOMMENDED MOTION: Approve with Consent Agenda.

STRATEGIC PRIORITY: Safe City

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND: The United States Department of Justice’s Office of Juvenile Justice and Delinquency Prevention (OJJDP) have created the Internet Crimes Against Children (ICAC) Task Force Program, a national network of state and local law enforcement cybercrime units. The mission of ICAC is to assist state and local law enforcement agencies in developing an effective response to technology-facilitated child sexual exploitation and Internet crimes against children using a multi-jurisdictional, multi-agency, team approach. The Seattle Police Department has been designated by the OJJDP as the Lead Agency of the ICAC, and as the recipient of a Federal grant, the SPD assists state and local law enforcement agencies (Affiliate Agencies) by increasing their computer forensic capabilities, expanding available resources, and promoting appropriate training to ensure the successful investigation of Internet related crimes against children.

ATTACHMENTS:

[NW Regional Task Force Memorandum of Understanding](#)

FISCAL DETAILS: The BIPD believes participation in the ICAC Task Force will have an indirect and negligible fiscal impact. 374

Fund Name(s):

Coding:



INTERAGENCY AGREEMENT

BETWEEN

THE WASHINGTON STATE INTERNET
CRIMES AGAINST CHILDREN TASK FORCE
ACTING THROUGH THE CITY
OF SEATTLE POLICE DEPARTMENT

AND

BAINBRIDGE ISLAND POLICE DEPARTMENT

This Interagency Agreement is entered into by and between the Washington State Internet Crimes against Children Task Force (WA ICAC TF), acting through the City of Seattle Police Department and Bainbridge Police Department (Affiliate Agency) acting through its duly authorized representative.

WHEREAS, The United States Department of Justice (DOJ) Office of Juvenile Justice and Delinquency Prevention (OJJDP) have created the Internet Crimes Against Children (ICAC) Task Force Program, which is a national network of state and local law enforcement cybercrime units. The mission of the national ICAC Task Force Program is to assist state and local law enforcement agencies develop an effective response to technology-facilitated child sexual exploitation and Internet crimes against children. This assistance encompasses forensic and investigative components, training and technical assistance, victim services, prevention and community education. Due in large part to the technological aspects of these cases, the ICAC Task Force Program promotes a multi-jurisdictional, multi-agency, team approach to investigating and prosecuting ICAC cases; and

WHEREAS, the ICAC Task Force Program is a national network of 61 coordinated task forces representing more than 3,500 federal, state, and local law enforcement and prosecutorial agencies with each task force having an agency designated by the OJJDP as the "Lead Agency" which is the law enforcement agency that is awarded federal funding to serve as the "Lead" Agency for the corresponding Task Force.

WHEREAS, the SPD has been designated by the OJJDP as the "Lead Agency" to oversee the multi-jurisdictional Washington State Internet Crimes Against Children Task Force (WA ICAC TF) intended to combat crimes related to the sexual exploitation, enticement and victimization of children through the Internet, online communication systems, telecommunications technology and other computer technology; and

WHEREAS, the SPD is the recipient of a Federal grant through the OJJDP to assist in the investigation and prosecution of Internet crimes against children; and

WHEREAS, the SPD will assist law enforcement agencies in Washington State to increase their computer forensic capabilities and receive appropriate training to investigate Internet related cases; and

WHEREAS, agencies that agree to work with the SPD as the "Lead Agency" shall be identified in the program as an "Affiliate" or "Affiliate Agency" will execute this signed agreement under the authorization of the proper authority of said agency following all of the terms, conditions and tenets contained herein.

NOW THEREFORE, the parties hereto agree as follows:

This Interagency Agreement contains thirteen (13) Articles.

ARTICLE I TERM OF AGREEMENT

Affiliate Agencies may withdraw from this Interagency Agreement and new Affiliate Agencies may be added by executing an Interagency Agreement with the SPD in substantially the same form as this Interagency Agreement. The term of this Interagency Agreement shall be in effect until terminated pursuant to the provisions hereof. Either agency may cancel this agreement with (30) thirty days of written notification to the other agency. Said notification must be provided from the appropriate authorized authority within that agency. Upon receipt of the written notification the SPD will permanently remove the agency from Affiliate Agency status with the ICAC Program.

ARTICLE II OPERATIONAL STANDARDS

Affiliate Agencies agree to adhere to the ICAC Task Force Program Operational and Investigative Standards, attached to and made part of this Agreement, as Attachment A. The undersigned law enforcement agency agrees to investigate ICAC cases within their jurisdiction, and assist other jurisdictions to investigate these cases.

Affiliate Agencies agree to participate on the Washington Internet Crimes Against Children Task Force that is overseen by the SPD.

Affiliate Agencies agree to use only sworn law enforcement investigators to conduct ICAC investigations. Each investigator involved with undercover operations must receive ICAC Program training prior to initiating proactive investigations and shall submit reports of all undercover activity to the SPD ICAC prior to conducting the investigation.

Affiliate Agencies agree to conduct reactive investigations where subjects are associated within the Affiliate Agencies jurisdiction, including investigations of child pornography, Cybertip (CT) referrals from the National Center for Missing and Exploited Children (NCMEC), Internet Service Provider (ISP) and law enforcement referrals, and other ICAC-related investigations. Additional case initiations may develop from subject interviews,

documented public sources, direct observations of suspicious behavior, public complaints, etc.

Affiliate Agencies agree to record and document all undercover online activity. Any deviations from this policy due to unusual circumstances shall be documented in the relevant case file, reviewed and authorized by the ICAC Unit Commander, or equivalent, for that agency.

Affiliate Agencies agree to provide the SPD with access to all ICAC investigative files including, without limitation, computer records, in order to ensure compliance with all national ICAC standards.

Affiliate Agencies agree to locate its ICAC investigators in a secured space, to be provided by the Affiliate Agency, with controlled access to all equipment, software, and investigative files. At a minimum, information should be maintained in locked cabinets and under control of each Affiliate Agencies ICAC personnel, with restricted access to limited authorized personnel.

Affiliate Agencies agree to conduct education and prevention programs to foster awareness and provide practical, relevant guidance to children, parents, educators, librarians, the business and law enforcement communities, and other individuals concerned about Internet child safety issues. Presenters shall not discuss ongoing investigative techniques and undercover operations utilized by the WA ICAC TF, its Affiliate Agencies or the national ICAC Program.

Affiliate Agencies agree to be responsible for proper maintenance and use of any equipment purchased with OJJDP Grant funds and loaned to an Affiliate Agency by the SPD. Upon termination of this Interagency Agreement, ownership of equipment, hardware, and other non-expendable items will revert to the SPD.

Affiliate Agencies agree to utilize applicable State and Federal laws to prosecute criminal, civil, and forfeiture actions against identified violators, as appropriate.

Affiliate Agencies shall maintain accurate records pertaining to prevention, education and enforcement activities, to be collected and forwarded not less than monthly to the SPD ICAC Strategic Advisor, Seattle Police Department, wa.icac@seattle.gov or entered directly into IDS, for statistical reporting purposes (form provided.)

ARTICLE III SUPERVISION

Each Affiliate Agency will be responsible for the day-to-day operational supervision, administrative control, and personal and professional conduct of its officers and agents assigned to assist the WA ICAC TF. WA ICAC TF investigations are a cooperative effort and investigative decisions will be a joint process guided by the ICAC Task Force Program Operational and Investigative Standards.

ARTICLE IV JURISDICTION

The principal sites of WA ICAC TF activities will be in the respective jurisdictional area of each Affiliate Agency. Nothing in this agreement shall otherwise limit or enhance the jurisdiction and powers normally possessed by an Affiliate Agency's employee(s) as a member of the WA ICAC TF. Affiliate Agencies may on occasion be referred investigations that are outside of the physical boundaries of their respective municipalities due to specific needs, capabilities or expertise as identified by the WA ICAC TF Lead Agency. Affiliate Agencies agree to take these referrals and conduct appropriate investigations in conformance with the ICAC Operational Standards, investigative or operational training, and their agency policing policies.

ARTICLE V EVIDENCE

Seized evidence and any other related forfeiture will be handled in a manner consistent with the seizing law enforcement agency's policies.

ARTICLE VI INSURANCE AND LIABILITY

Each Affiliate Agency shall maintain sufficient insurance coverage or a fully funded self-insurance program, approved by the State of Washington, for the protection and handling of the liabilities including injuries to persons and damage to property. Each Affiliate Agency agrees to maintain, at its own expense, insurance or self-insurance coverage for all of its liability exposures for this Agreement and agrees to provide the City of Seattle with at least 30 days prior written notice of any material change in the Affiliate Agency's liability coverage.

ARTICLE VII REPORTING STANDARDS

Using a process provided by the SPD, each Affiliate Agency shall submit monthly statistics to the SPD on all ICAC investigations or other investigative work pertaining to the sexual exploitation of children via the Internet. These statistics shall be submitted in the appropriate format by the 10th day of each successive month that the statistics were acquired and shall include data on all related investigations opened or closed during the month in all of the categories as designated on the provided form.

In addition, a breakdown or summary of basic case data shall be included for each sexual exploitation of a minor (child pornography) case, and/or criminal solicitation of a minor (enticement/traveler) case investigated by an Affiliate Agency along with references to any local media reporting on the investigation. The SPD will be responsible for all required reporting to the OJJDP.

ARTICLE VIII TRAINING

Affiliate Agencies shall make every effort to make investigators designated as Task Force Members available for applicable specialized training provided through the national ICAC Program and other appropriate training programs. The SPD will review training requests and provide funding for ICAC-approved training when appropriate. This funding will include, but is not limited to; WA ICAC TF hosted, or sponsored or facilitated training through the national ICAC Programs authorized vendors.

Affiliate Agencies seeking funding assistance will be required to submit requests at least thirty (30) days in advance in writing and to comply with the procedures set forth in a separate Interagency Agreement for funding requests. A sample of this Interagency Agreement is available upon request but in no way is tacit or expressed authorization of requested funding or financial assistance given in advance. Funding under the Interagency Agreement is limited to the available funds that are received by the SPD under the OJJDP Grant program for the national ICAC program.

ARTICLE IX CONFIDENTIALITY

The parties agree that any confidential information pertaining to investigations of WA ICAC TF will be held in the strictest confidence, and will only be shared with other Affiliate Agencies or other law enforcement agencies not participating in the WA ICAC TF where necessary or as otherwise permitted by federal and/or state law.

ARTICLE X COMPLIANCE WITH EQUAL OPPORTUNITY LAWS

To the extent required by law, the Affiliate Agency shall comply with all applicable laws, standards, orders and regulations regarding equal employment which are applicable to the Affiliate Agency's performance of this Interagency Agreement, including Rules of Practice for Administrative Proceeding to Enforce Equal Opportunity under Executive Order No. 11246, title 41, subtitle B, Chapter 60, part 60-30, which are incorporated herein by reference.

ARTICLE XI GOVERNING LAW AND VENUE

This Interagency Agreement is governed in all respects by applicable local, State, and Federal laws which shall supersede any provisions made in this Interagency Agreement to the contrary. Any provision effected will not negate the rest of the Interagency Agreement. In case any one or more of the provisions contained in this Interagency Agreement shall be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof and this Interagency Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein. Exclusive venue is in Seattle, King County, Washington.

ARTICLE XII EFFECTIVE DATE

This Interagency Agreement shall be effective when executed and shall continue for three years. Upon expiration of the three years this Interagency Agreement shall automatically be renewed for one (1) additional year until such time as federal funding for the ICAC Task Force Program ends or the Interagency Agreement is canceled by either party upon 30 days' written notice delivered to both parties as delineated in ARTICLE I TERM OF AGREEMENT. This Interagency may be executed in multiple counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

The additional or deletion of Affiliate Agencies to or from this Interagency Agreement shall not affect the Interagency Agreement with the remaining Affiliate Agencies.

This Interagency Agreement can be amended or replaced in the event of new requirements under the national ICAC Task Force Program or as designated by law or other proper lawful authority.

ARTICLE XIII AMENDMENTS

No modification or amendment of the provisions hereof shall be effective unless in writing and signed by authorized representatives of the parties hereto. The parties hereto expressly reserve the right to modify this Agreement, by mutual agreement.

WASHINGTON STATE
INTERNET CRIMES AGAINST CHILDREN
TASK FORCE

INTERAGENCY AGREEMENT

EXECUTED BY

The SEATTLE POLICE DEPARTMENT,
a department of the City of Seattle, hereinafter referred to as "SPD",
Department Authorization Representative:
Captain Michael Edwards
PO Box 34986
Seattle WA 98124-4986

AND

The BAINBRIDGE POLICE DEPARTMENT
a department of the City of Bainbridge Island, hereinafter referred to as "BIPD"
Department Authorized Representative:
Interim Chief of Police Jeffrey Horn
Bainbridge Island Police Department
625 Winslow Way E.
Bainbridge Island, WA 98110

In Witness Whereof, the parties have executed this Agreement by having their representatives affix their signatures below.

CITY OF BAINBRIDGE ISLAND

SEATTLE POLICE DEPARTMENT

Morgan Smith, City Manager

Carmen Best, Chief of Police

Date:

Date:



CITY OF
BAINBRIDGE ISLAND

Special City Council Meeting Agenda Bill

MEETING DATE: January 16, 2020

ESTIMATED TIME: 5 Minutes

AGENDA ITEM: (8:00 PM) Committee Reports,

SUMMARY: Recent committee reports are provided for information only.

AGENDA CATEGORY: Discussion

PROPOSED BY: Executive

RECOMMENDED MOTION: Information only.

STRATEGIC PRIORITY: Good Governance

FISCAL IMPACT:

Amount:	
Ongoing Cost:	
One-Time Cost:	
Included in Current Budget?	

BACKGROUND:

ATTACHMENTS:

[Climate Change Advisory Committee Meeting Minutes, November 18, 2019](#)

[Ethics Board Meeting Minutes, October 21, 2019](#)

[Environmental Technical Advisory Committee Minutes, October 17, 2019](#)

[Ethics Board Meeting Minutes, September 16, 2019](#)

[Utility Advisory Committee Minutes, December 11, 2019](#)

FISCAL DETAILS:

Fund Name(s):

Coding:

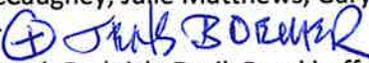
CLIMATE CHANGE ADVISORY COMMITTEE

Regular Meeting

Monday, November 18, 2019, 6:30-8:30 PM

Bainbridge Island City Hall

MINUTES

Present: Committee members Michael Cox, David McCaughey, Julie Matthews, Gary Lagerloef, Council Liaison Joe Deets, Deputy City Manager Ellen Schroer 

Absent: Committee member Nora Ferm Nickum, Deborah Rudnick, Derik Broekhoff, Lara Hansen

Others:

Public: Rick Freeman, Andy Swayne (PSE)

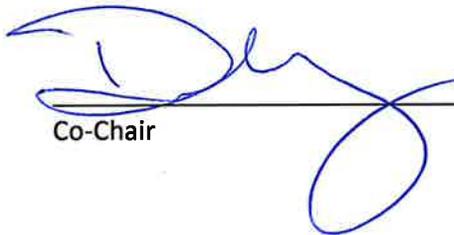
1. The meeting was called to order at 6:32 pm.
2. Minutes from the previous meeting (October 16, 2019) were approved.
3. Public comment
 - Rick Freeman wished to acknowledge the effort of the CCAC
 - Andy Swayne said that the PSE is still receiving RFI responses – 2 to date state-wide
4. Report Out GHG Emissions Inventory Discussion
 - Carbon Sequestration Analysis – a good first pass using a tool that is still being refined – suggestion to move this section to an Appendix and explain how it is preliminary info
 - Ellen will talk to Cascadia Consulting and ask for the 4 references within the Exec Summary and body of the GHG report to be removed/edited to support the appendix placement
 - Discussion ensued – nascent i-Tree technology – additional value could be applied if the following were considered:
 - Soil, species type, age, height and board foot data
 - Potential use in the future as the tech improves
 - What direction should we give to Cascadia with the time remaining – in order to have the report in front of council – if edits are possible, it would be preferred to have final by late Nov.
 - Given the proposed Emissions Inventory Community workshops in December
 - Dec 3rd council is to accept/receive it no need to approve it
5. Updates
 - Climate Action Plan (CAP) Development - Nov 20th conventions submitted to Mike from Julie Draft conventions (i.e. Island, periods, spaces); GHG piece to be cleared up to Mike and Gary; Energy – sharing the current version with UAC Andy Maron and/or Ted Jones; Building shared with the DRB
 - Community Workshops --- Dec 7th 10-12 COBI City Hall Dec 11th 6:30-8:30 pm BHS Library
 - Reviewed the general structure of the meetings

- Goals per Subject Area (facilitators could have Actions to share to stimulate the discussion)
- CAP Overview – in the beginning
- Timing was discussed: Open house 20min, Break-out 1-20 min, Break-out 2-20 min; then landed on 30 min open house and (one) 30 min breakout per topic
- Possible COBI promotion of Workshops - weekly City Manager emails, COBI Connects, social media
 - CCAC webpage <https://www.bainbridgewa.gov/922/Climate-Change-Advisory-Committee>
 - HYL A shoot out Dec
 - WSF Wednesday Dec 4th Afternoon Commute – Kristen Drew to assist with protocol/contacts
- PSE – offered to promote on their website <https://psebainbridge.com/>
- Schools will post through their channels
- BI Review and Islander – letter to the editor and calendar inclusion
- Separate “Climate Change” or something to that effect COBI webpage (Ellen)
- Discussion of roles of Facilitators and Note Takers
- December 3rd City Council Study Session – Cascadia Consulting GHG Inventory and Tree Canopy Discussion 45 min, CCAC CAP Discussion 15 min
 - This session is in response the August 6th Study Session request by council – bearing in mind - What are your benchmarks and where are you headed?
 - What is the purpose and ultimate goal 90% by 2040? So what?
 - Each area will have goal – how did we get there – quantified if it can be
 - What is the process for each focus area?
 - Show the process as to how we can get there
 - Monday, Nov 25th to get this information in the council packet
 - Dec 3rd Mike and David to present at the session
- Green Building Code – green building code council memo that there will be more formal creation of the task force – how many people? What does balance look like?
 - Potential members - DRB, CCAC, UAC, contractors
 - GB requirements – incentives (easy solar permits)
 - Reducing business as usual hurdles in the permitting process
- PSE - Franchise discussions – PSE viewed as one partner to our carbon emission reductions and very much tied to the success of the CAP rollout
 - Last Tuesday Nov 11th Renne and Matt Barry a project developer (Barry)
 - CETA goals are only going to be made by Conservation first (kWh)– AND reduction of peak load (capacity - kW) maximum output at a given time
 - PSE must come up with models of how they propose to achieve the CETA goals
 - Possible SME’s list from Jens --- 6 different topics: expected load growth, RE project development/RFI, RE for homes including smart inverters, financial expert for PSE’s Green Power and Solar Choice programs, Battery storage expert for non-wire (critical facilities & emergency preparedness)
 - 9 hubs are proposed to provide - food medicine water --- AND possibly power Bainbridge Prepares – technical specs of what equipment would be necessary to provide this level of island-able energy

- RFI – 4 sites submitted by COBI, only 2 responses thus far in the entire service area

6. Other business:

- Rights of Nature – Nassar and Peltier – recognition that nature has some “rights” – possible that acknowledgement of those rights as decisions are made
 - 90% by 2040 not sure where that places us in the state or country
 - net zero – not an option because this is not possible
 - 2045 had to be carbon free at the state
 - Increase parking spaces – university study (Palo Alto) with the goal of reducing auto use that you will save more money – best to “not” build additional parking
 - Seattle Children’s Hospital employed a similar tactic by deploying employee ORCA, shuttles to reduce commuter congestion
7. Next meeting scheduled for Wednesday, December 18th at 6:30 pm.
8. The meeting was adjourned at 8:32 pm.


Co-Chair 12/18/19

ETHICS BOARD

Monday October 21, 2019

MINUTES

1. Call to order. Meeting was called to order at 6:04 pm. Present were Maradel Gale, Suzanne Keel-Eckmann, Jennifer Hodges, Brian Strully, Deputy City Attorney Robbie Sepler, Council Liaison Joe Deets, and member of the public Dave Henry.

2. Changes or Additions to Agenda. None.

3. Disclosure of conflicts of interest. None.

4. Acceptance of meeting notes – September 16, 2019. Robbie Sepler requested that Item 4 of the meeting minutes would be more accurately stated as follows:

“4. Acceptance of meeting notes –Robbie Sepler suggested the minutes specify the Executive Session on August 19th was held pursuant to RCW 42.30.110(1)(i). The Board put that up to a vote, 2 aye, 2 nay. With the vote being a tie, minutes from the August meeting were accepted as written.”

The Board accepted the September 16, 2019 meeting notes as amended.

5. Communications –Suzanne had communications with Maradel Gale and Robbie Sepler.

6. Public Comment. Dave Henry asked why, when an executive session is invoked, the subject matter of the executive session is not disclosed, even in a general way, instead of citing the Code section under which the Executive Session was held.

7. City Council/Ethics Board Program Discussion - Jennifer Hodges volunteered to attend the City Council meeting on October 22 and to represent the Ethics Board in the event Ethics Board input would be helpful to the City Council discussion and potential vote regarding changes to the Ethics Program on the agenda for that meeting. The Board discussed the latest revisions to Code sections related the Ethics Program. The Ethics Board Work Plan was very generally discussed in light of the fact that revisions to the Ethics Program are still underway. The Board unanimously voted to table the development of a Work Plan until revisions to the Ethics Program are complete.

8. Items for next meeting Agenda. None proposed.

9. Next Meeting Date. November 18, 2019 at 6:30pm.

10. Adjournment. 7:30 pm.



Suzanne Keel-Eckmann, Chair

1/21/16 2019



MINUTES

Call to Order at 3:19 PM

Member Attendees: Karl Shearer, Charlie Kratzer, Jane Hannuksela, Juan Rovalo (on phone), Melanie Keenan (on phone)

Members Absent: Michelle McClure, Steve Saepoff, Casey Schmidt, Dylan Fraser

Council Liaison: Rasham Nassar (absent)

Minutes from August 8, 2019 meeting approved.

Council Liaison Report

- Rasham was present just before the meeting started and stated that she nothing to report.

Chair Report on Activities Since 8/8 Meeting

- Chair received a Public Records Request from Roz on 10/15 for 3 documents relating to the GWMP: (1) ETAC 32-page document sent to Council on 11/1/18; (2) ETAC talking points for 11/6/18 Council meeting presentation on GWMP; and (3) Memorandum sent to Council on 11/19/18 in support of GWMP and a proposed budget. The Chair sent these documents to Roz on 10/16;
- Chair made comments (as private citizen) at 8/27 Council meeting, expressing concerns about how stormwater will be dealt with in Suzuki development;
- Chair assisted Christian Berg of COBI Water Resources in sediment sampling on 8/29;
- Chair sat at table with Christian Berg at Harvest Festival on 9/22, discussing water issues with citizens;
- Chair attended AWRA-WA Annual Conference on 10/1 at Mountaineers in Seattle. Big topic of discussion was Hirst Decision and watershed assessment being done in WRIAs, including WRIA 15 (Kitsap County including BI);
- Chair interviewed for COBI Hydrogeologist position on 10/9.

GWMP Update

- Nothing has changed; interviews have happened for Hydrogeologist position.

GW Fact Sheet Update

- No changes since last meeting.

Meeting adjourned at 3:52 PM


Charlie Kratzer, Chair 01/09/20 11/9/20

COBI ETHICS BOARD

Monday September 16th, 2019
6:00 – 8:00 PM

Bainbridge Island City Hall, Council Conference Room
Bainbridge Island, WA 98110

Minutes

1. Call to order. Meeting was called to order at 6:00 PM Present were Maradel Gale, Brian Strully, Chair Pro Tem and Jennifer Hodges, Ingrid Billies, and Deputy City Attorney Robbie Sepler, Joe Deets and members of the public Lisa Neal and Sal DeRosalia .
2. Changes or Additions to Agenda. None.
3. Disclosure of conflicts of interest. None.
4. Acceptance of meeting notes. Robbie Sepler suggested the minutes for August 19, 2019, reflect that the Executive Session was held pursuant to RCW 42.30.110(1)(i). The Board put that up to a vote, 2 aye, 2 nay. With the vote being a tie, minutes from the August meeting were accepted as written.
5. Communications. Jennifer had communications with Suzanne, Maradel had communications with Suzanne and Sarah Blossom, Brian had communications with Suzanne.
6. Public Comment. Sal DeRosalia asked how the Ethics Program will be materially different than it was 6 months ago. Joe Deets answered that tomorrow at the City Council meeting the answer to that question may be more clear than it would be this evening. Lisa Neal would like to suggest that reasons for going into Executive Session be stated on the minutes.
7. Public Records Act. Deputy City Attorney Robbie Sepler gave the Board training on the Public Records Act.
8. City Council/Ethics Board Program Discussion. Jennifer will be attending the City Council meeting on August 17th and will represent the Ethics Board. Discussion on recommendations of Council members Blossom and Peltier. Robbie led a discussion on his Potential Discussion Points for the City Council, the Board and Robbie also discussed at length the definitions of “Direct Official Action” and “Fact Finding”.
9. 2019-02 Advisory Opinion Response. This will be addressed at the next meeting of the Ethics Board.
10. Items for next meeting agenda. 2019-02 Advisory Opinion Response, outcomes of any subsequent Ethics Board discussions, meeting time 6:00 or 6:30, Brian will consult with

Suzanne and Roz and confirm the start time being 6:00 or 6:30.

11. Next meeting date: October 21st, 2019.

12. Adjournment. 8:27.



Suzanne Keel-Eckmann, Chair



Minutes

The meeting was called to order at 5:05 p.m. by co-chair Andy Maron.

Members Present: Ted Jones, Andy Maron, Sheina Hughes, Nancy Nolan, Martin Pastucha

Members Absent: Charlie Averill, Emily Sato

Others Present: Public Works Director Chris Wierzbicki, Council Liaison Rasham Nassar, former member Jeff Kantor

Minutes of the November 13, 2019 meeting were approved as submitted.

Upcoming Water and Sewer Facility Tour:

A tour is planned for new members of the Council and the UAC. Suggested dates are January 11th and February 1st. Co-chair Andy Maron and Public Works Director Wierzbicki will also accompany the tour. The Public Works Director will follow up with new council members to determine which date works best for them.

Public Works Department Update

Lower Lovell Project: Chris discussed the Lower Lovell project which involves the movement of two sewer lines and construction and improvement of pump stations. The project is already built into the CIP. A consultant has already made a presentation the Committee and the Council concerning different possible options for accomplishing this project. A consultant will be hired to do the final design work. A brief discussion ensued about possible assessments on landowners for this very expensive project and the imposition of fees on new development in the area.

High School Road Reservoir Project: The tank design for the High School Road reservoir will be further reviewed this spring.

Hydrogeologist Position: Chris reported that the two-year temporary hydrogeologist position is still unfilled. Once the position is filled, the committee will discuss the scope of the groundwater management plan.

2019 Activity Report and 2020 Work Plan Memorandum:

The draft Report and Work Plan Memorandum was reviewed. Former member Jeff Kantor was recognized and noted that the 2020 Work Plan does not include further action on item #4 of the 2019 Activity Report, regarding the revision of the Fire Code to clarify the requirements for water systems attempting to upgrade their aging systems. It was proposed that the Memorandum be revised by adding a new paragraph C clarifying the recommendation that a stakeholder's committee be formed to assist in revising and clarifying the Fire Code, and that the UAC was waiting further direction from the Council. Several other typos and small clarifications were added to the Memorandum, and the Report and Plan Memorandum was unanimously approved as amended. Chair Maron will send a copy of the revised final Memorandum to members and the Council before the next meeting.

Small Water Systems:

The committee reviewed a newly updated City map containing locations of water systems and private wells on the Island. Members noted that some wells were not on the map.

The Public Works Director will invite Steve Brown of the Health District to attend a UAC meeting to discuss the following issues:

1. How much information the Health Department has about existing wells.
2. How the permitting process works for the drilling of new wells.
3. Whether there is a current process to establish if an application for a new well is within ¼ mile of an existing Group A system as suggested in the County's Coordinated Water System Plan.
4. Whether there is an enforcement mechanism for ensuring that obsolete wells are closed.



CITY OF
BAINBRIDGE ISLAND

UTILITY ADVISORY COMMITTEE
REGULAR MEETING
WEDNESDAY, DECEMBER 11, 2019

Additionally, Public Works Director Wierzbicki will find and distribute a copy of the Legislative "fix" to the Hirst decision and will contact City Operations and Management director Chuck Krumheuer about addressing the committee at a future meeting to talk about the history of the City serving as an Satellite System Manager.

The meeting was adjourned at 7:05 p.m.



Co-Chair 01/08/20