City Council Meeting Schedule March 2021

City Council temporarily designated the location for regular, special and study session meetings to a virtual location until termination of the state of emergency or until rescinded. The City broadcasts City Council meetings on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts.

March 2, 2021
Tuesday, 6:30 p.m. — REGULAR COUNCIL MEETING

March 9, 2021
Tuesday, 6:30 p.m. — WORKSHOP MEETING (the workshop meeting will be done via Zoom and broadcast on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts)

1. Legislative Update
2. Creative Arts District Update
3. Public Works Projects/Programs Updates

March 16, 2021
Tuesday, 6:30 p.m. — REGULAR COUNCIL MEETING

March 23, 2021
Tuesday, 6:30 p.m. — WORKSHOP MEETING (the workshop meeting will be done via Zoom and broadcast on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts)

1. Entertainment District Update
2. Kennewick Public Facilities Update
3. Visit Tri-Cities Annual Update
4. KPD Drone Update

March 30, 2021
Tuesday, 6:30 p.m. — NO MEETING SCHEDULED

To assure disabled persons the opportunity to participate in or benefit from City services, please provide twenty-four (24) hour advance notice for additional arrangements to reasonably accommodate special needs.

Please be advised that all Kennewick City Council Meetings are Audio and Video Taped

Council Workshop Coversheet

Agenda Item Number	1.	Meeting Date	03/09/2021	Info Only ☒
Agenda Item Type	Presentation			Policy Review ☐
Subject	Legislative Session Update			
Ordinance/Reso #		Contract #		Policy DevMnt ☐
Project #		Permit #		Other ☐
Department	City Manager			

Summary

During the workshop on March 9th, we will have Tom McBride and Ben Buchholz, our lobbyists from McBride Public Affairs, provide an update on the legislative session.

Through		*Attachments:*
Dept Head Approval		
City Mgr Approval	Marie Mosley Mar 04, 08:45:34 GMT-0800 2021	

Council Workshop Coversheet

Agenda Item Number	2.	Meeting Date	03/09/2021	Info Only ☒
Agenda Item Type	Presentation			Policy Review ☐
Subject	Creative Arts District Update			
Ordinance/Reso #		Contract #		Policy DevMnt ☐
Project #		Permit #		Other ☐
Department	Finance			

Summary

Historic Downtown Kennewick Partnership (HDKP) will provide an update to Council on the progress of the Creative Arts District program.

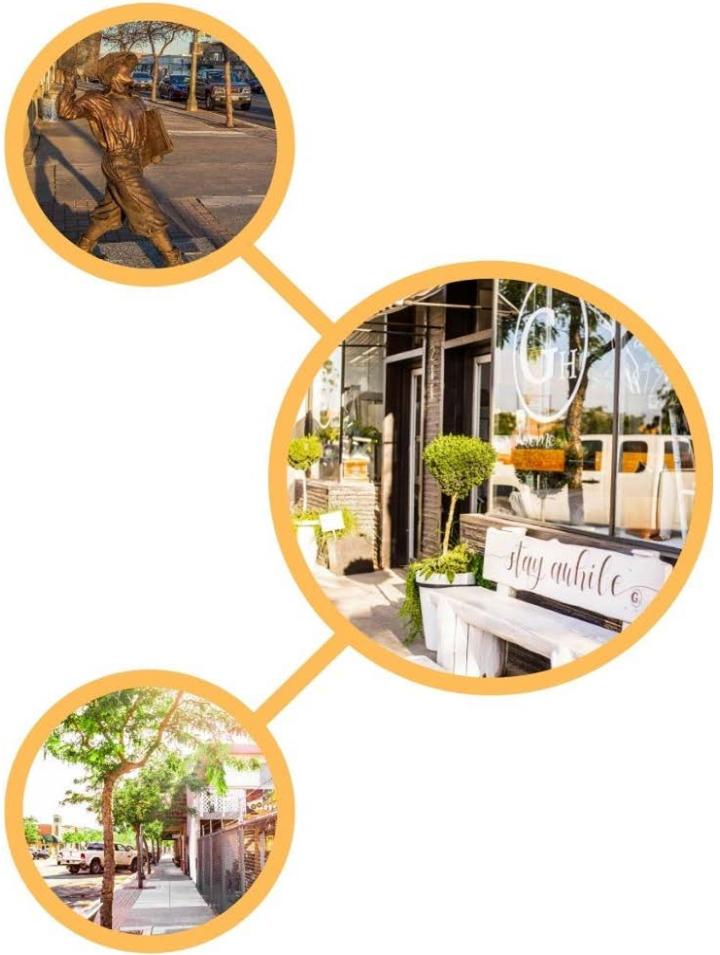
Presenters will include:
HDKP Program Manager, Amber Maiden
HDKP Executive Director, Stephanie Button

Through	Rohana Carmichael Mar 03, 09:56:16 GMT-0800 2021	*Attachments:* Presentation
Dept Head Approval	Dan Legard Mar 03, 10:04:37 GMT-0800 2021	
City Mgr Approval	Marie Mosley Mar 04, 08:59:19 GMT-0800 2021	

Historic Downtown Kennewick Partnership

Community through Partnership

Presentation to City Council March 9, 2021



Kennewick Certified Creative District

South Columbia Creative District

Supporting our community and creative economy in our backyard

arts.wa.gov

The certified Creative Districts program works to help communities in Washington thrive. Its purpose is to help communities strengthen their creative sector, diversify their economy, and enhance the arts and culture a community has to offer

What is a Certified Creative District -

A Creative District is a geographically defined area of culture and economic activity. It's an exciting plaza to live, work and visit. It's the heart of a community - a place for people to gather and enjoy the arts and culture a community has to offer.

Creative District Administrative Point of Contact - Amber Maiden
amber@historickennewick.org 509-582-7221

Proposed:
South Columbia Creative District

Blue - Suggested Creative District boundaries

Red - Current HDKP District boundaries

Out of the **140+ businesses** in just the historic downtown center, **76** of them are considered creative industries, roughly **52%**

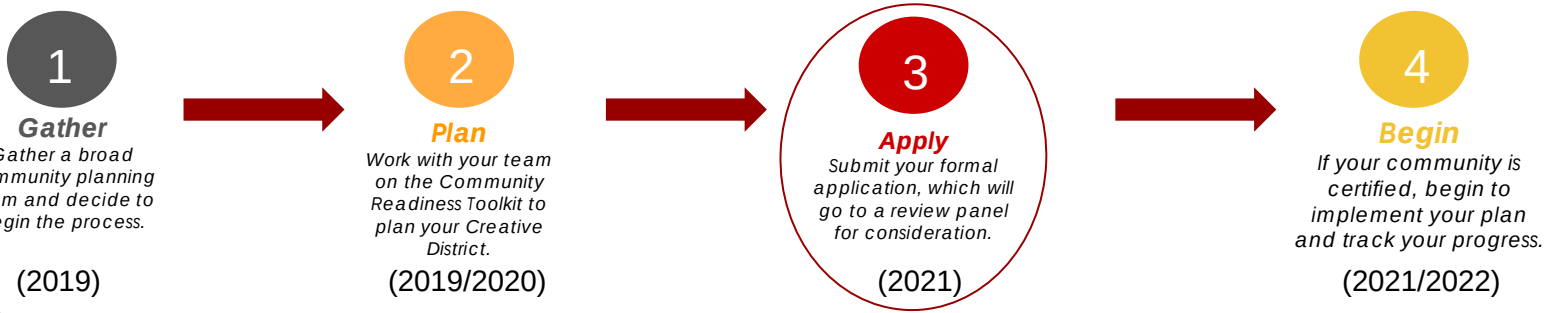
Out of the **78 occupations** listed by creative district qualifications, we have **50** in the downtown, roughly **64%**.

Creative Businesses

Glass and glazing contractors
Tile and terrazzo contractors
Teleproduction and other postproduction services
Breweries
Industrial design
Drafting services
Architectural services
Historical sites

Creative Jobs/occupations

Software developers
Web developers
Advertising and promotions manager
Curators
Floral designers
Chefs and head cooks
Audio and video equipment technicians
Archivists



Council Workshop Coversheet

Agenda Item Number	3.	Meeting Date	03/09/2021
Agenda Item Type	Presentation		
Subject	Public Works Department Update		
Ordinance/Reso #		Contract #	
Project #		Permit #	
Department	Public Works		

Info Only ☒
Policy Review ☒
Policy DevMnt ☒
Other ☒

Summary

Public Works staff will be present to provide the Council with an update on the following topics;

* Advanced Metering Infrastructure (AMI)/ Meter Replacement Project
* 2020 Annual Complete Streets Report
* 2021 Pavement Management Program
* 2020 Stormwater Comprehensive Plan Update

Through	
Dept Head Approval	Cary Roe Mar 03, 10:17:19 GMT-0800 2021
City Mgr Approval	Marie Mosley Mar 04, 13:14:22 GMT-0800 2021

Attachments: Presentation

Public Works Department

Council Workshop Update

March 09, 2021

Advanced Metering Infrastructure (AMI) / Meter Replacement Project

March 09, 2021

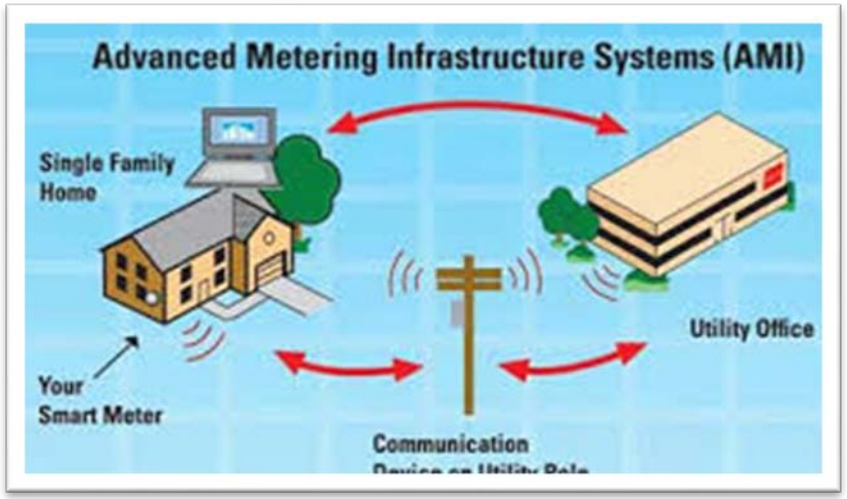
John Cowling, PE, Utility Services Manager

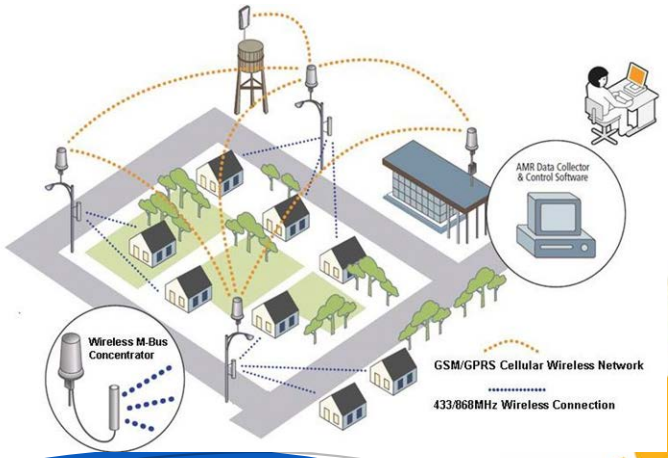
Jeremy Lustig, PE, Utility Services Capital Projects Engineer

Shannon Frame, Customer Service & Code Enforcement Manger

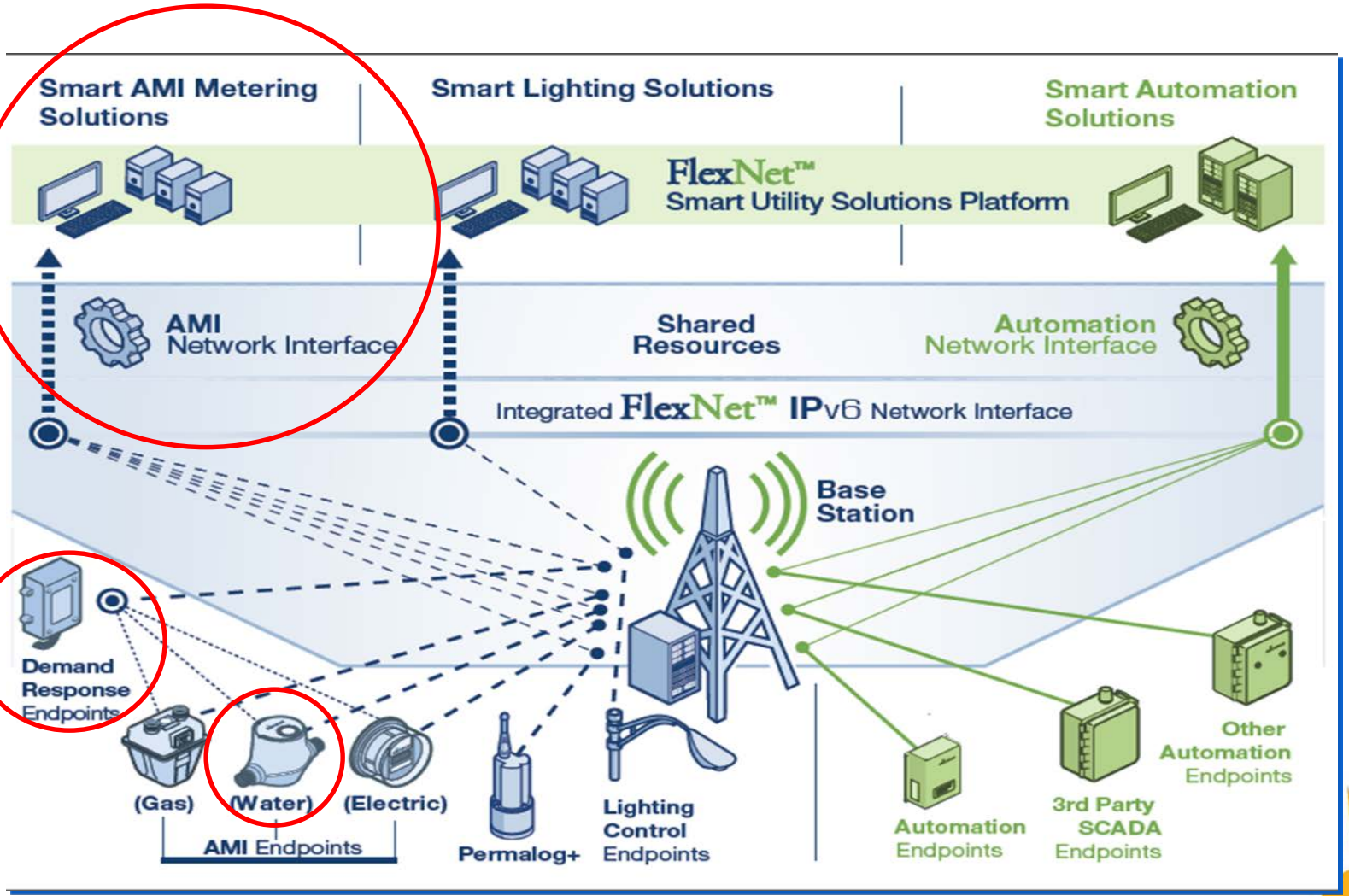
AMI / Meter Replacement

- Background
  - *The City currently collects data for almost 25,000 active water meter accounts requiring manual or drive by reading on a monthly basis (half accounts read each month)*
  - *Due to lack of a replacement program, the majority of meters are antiquated and in need of replacement, some areas being 30-40 years old.*
  - *To streamline meter reading with an AMI system and replace old meters, A Public Works Trust Fund loan in the amount of $6,000,000 was secured toward the project.*





AMI Network – smart city capable



AMI / Meter Replacement

- What is AMI?
  - *AMI – Advanced Metering Infrastructure is a two way communication device on each meter that collects and sends consumption data over a fixed network at set increments but also allows direct remote interaction from the City as well as valuable data such as:*
    - *Leak detection*
    - *Vacant building meter usage*
    - *Ability for customer service to instantly read consumption*
    - *Customer portal that provides consumption data and ability to review historical usage*
    - *Remote shut-off*
    - *Smart Cities Network compatibility*

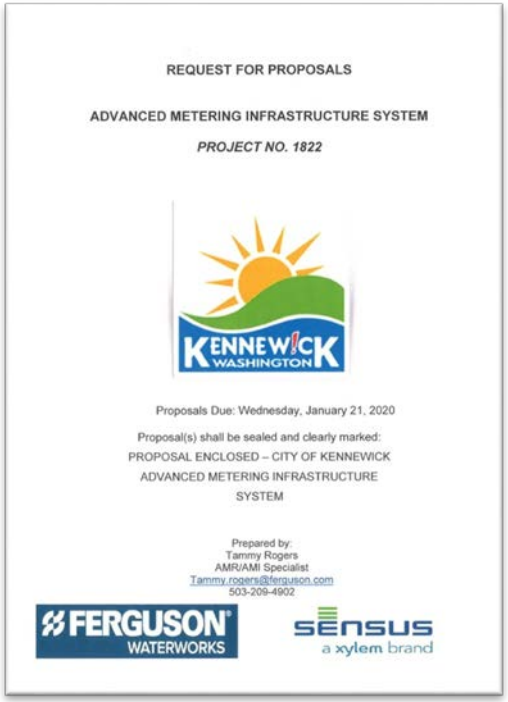
AMI / Meter Replacement

- What is the current state of our meters?

Age of Meters:	*Count:*
20 + Years Old	13,390
11-19 Years Old	5,515
8-10 Years Old	1,360
7 Years or Newer	5,132
Total	**25,397**

AMI / Meter Replacement

- Project Status
  - *Vendor RFP Issued*
    - *RFP's were reviewed and interviews held in spring 2020*
    - *Ferguson/Sensus selected for AMI Network, transmitters, and Analytics*
    - *Badger Meter selected to provide mechanical meters (will be part of Ferguson Contract)*
    - *Water Smart selected to provide Customer Portal*
  - *Based on projected project costs from vendors due to the number of required meter replacement it was necessary to split the project into two phases. Phase 1 being funded with the Public Works Trust Fund loan. Phase 2 will require securing a bond*
    - *Phase 1 – Stand up citywide network, implement analytics and customer portal software, replace 11,000 meters, retrofit 2,500 meters (install transmitters on both)*
    - *Phase 2 – complete remaining 11,000 meter replacements and transmitter installs*



REQUEST FOR PROPOSALS

ADVANCED METERING INFRASTRUCTURE SYSTEM

PROJECT NO. 1822

KENNEWICK WASHINGTON

Proposals Due: Wednesday, January 21, 2020

Proposal(s) shall be sealed and clearly marked:
PROPOSAL ENCLOSED – CITY OF KENNEWICK
ADVANCED METERING INFRASTRUCTURE SYSTEM

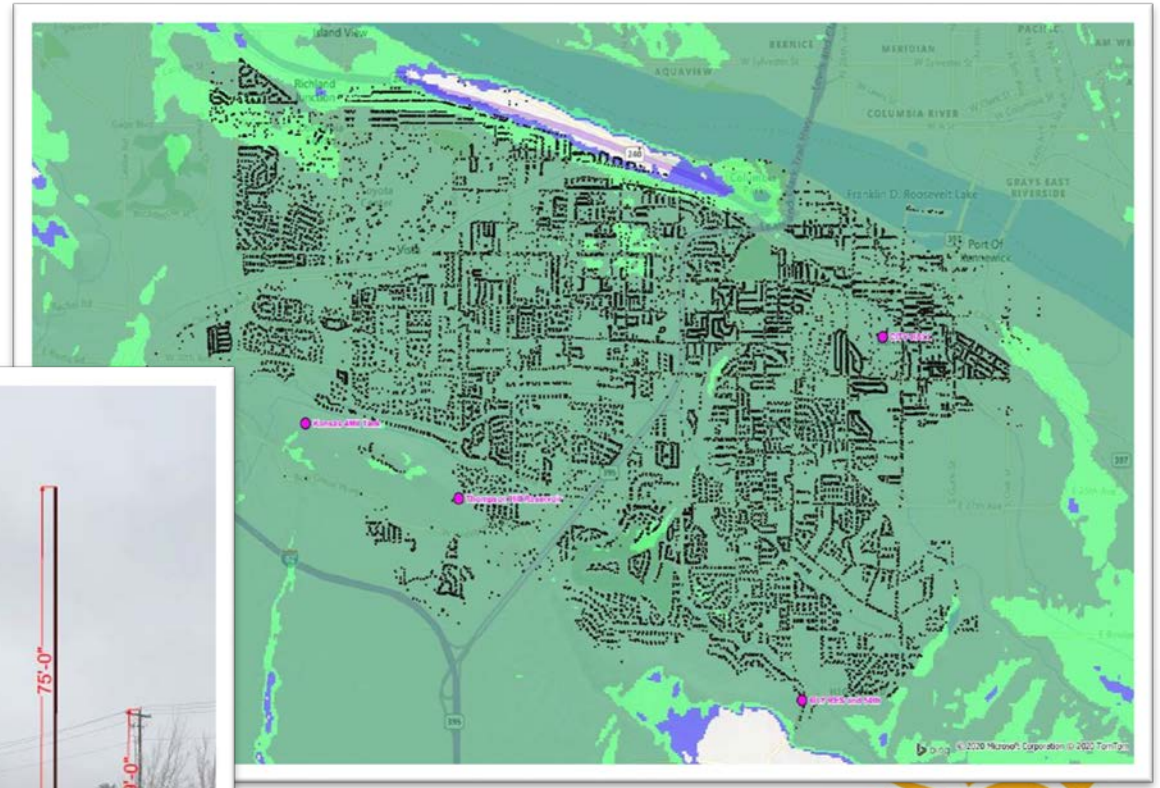
Prepared by:
Tammy Rogers
AMR/AMI Specialist
Tammy.rogers@ferguson.com
503-209-4902

FERGUSON WATERWORKS

sensus a xylem brand

AMI / Meter Replacement

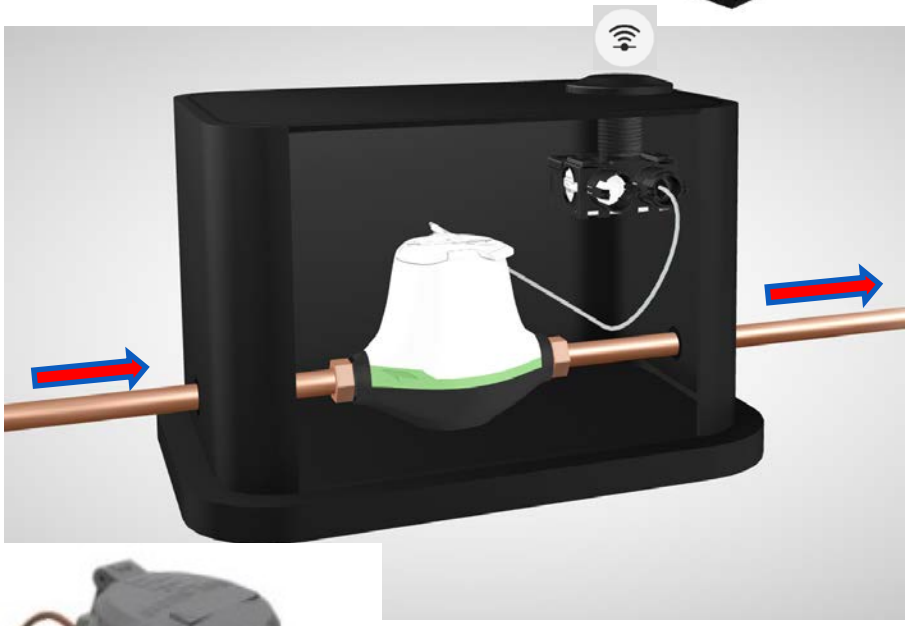
- Project Details
  - *Network*
    - *Propagation analysis shows need for four towers to read all ~25,000 meters Citywide. Proposed locations:*
      - *City Hall (ballfield by KPD)*
      - *54th and Olympia Reservoir*
      - *Thompson Hill Reservoir*
      - *Kansas Reservoir*
    - *Towers will be 55’ or 75’ poles with a whip antenna*



AMI / Meter Replacement

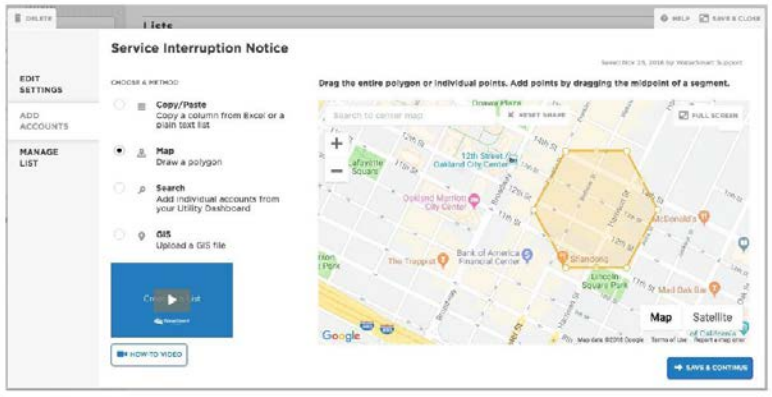
- Project Details
  - *Meters / Transmitters*

    - *Badger Mechanical Meters*
    - *¾” Recordall (brass body) - residential*
    - *High Resolution Encoder (register)*
      - *No Batteries*
    - *Sensus Transmitters*
    - *520M radio transmitter*
    - *20 year life battery*



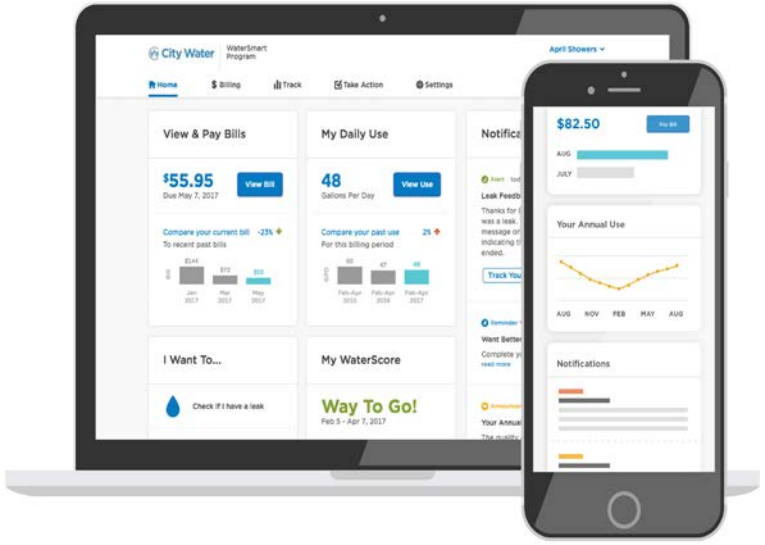
AMI / Meter Replacement

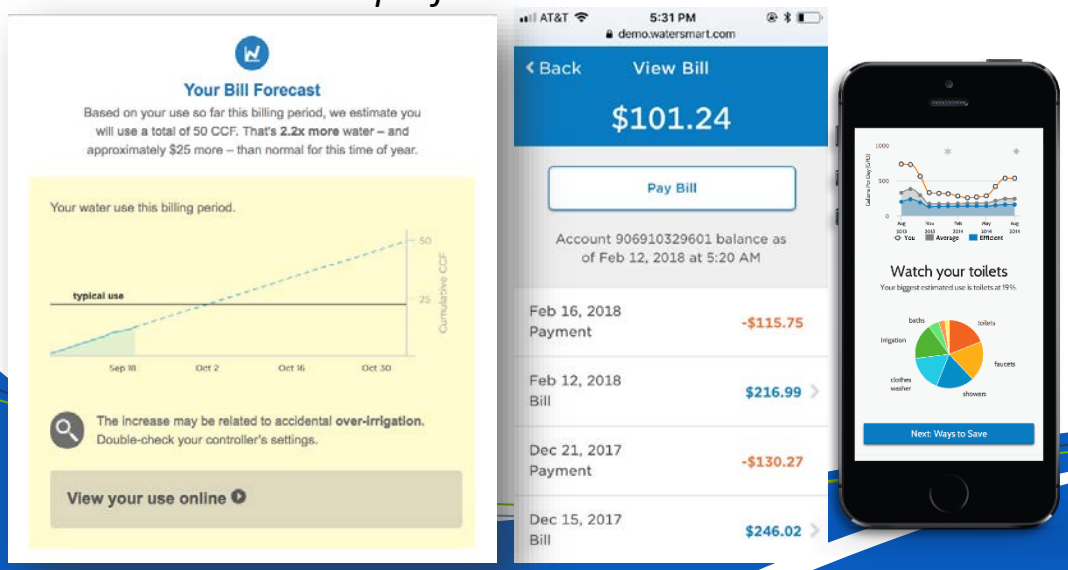
- Project Details
  - *Sensus Analytics - Internal Analysis of System*
    - *Enables deeper, more accurate insight into operations*
    - *Predicts conditions intelligently*
    - *Improves decision making quality and speed*
    - *Increases operational efficiency*
    - *Data extracts to Billing System easily for cycle billing*
    - *Get detailed device information so you can spot trends, identify usage anomalies or track specific issues with custom alerts*
    - *Validate incoming meter data from your network and proactively address communication issues*



AMI / Meter Replacement

- Project Details
  - *WaterSmart Customer Portal–External Facing*
    - *Single place for customers to get information on their water use, check and resolve leaks, sign up for paperless billing, self-service forms, Bill Explainer for automated self-help for customers to identify and resolve concerns*
    - *Electronic bill presentation and option to pay bills online*
    - *Interactive money and water-saving recommendation library, customized for each meter class profile*





- *Notifications via text message to specific areas about outages, rate, increases, boil water notices, leaks, etc… This is a dynamic field*
- *Allows outbound engagement with the customer plus drive digital conversion with Print Leak Alerts and personalized profiles*

AMI / Meter Replacement

- Project Cost
  - *Phase 1 - ~$6,000,000 (PWTFL)*
  - *Phase 2 - ~$5,000,000 (Bond)*

- Project Schedule
  - *Contract negotiations with Ferguson / Sensus and Water Smart. November 2020 – April 2021*
  - *Meter Box Survey – March 2021 – April 2021*
  - *Council Contract Award - ~May 2021*
  - *Phase 1 Construction – July 2021 – October 2022*
  - *Project pause for Munis Utility Billing implementation (10 months)*
  - *Phase 2 Construction – 2023 - 2024*

Questions?

Complete Streets Annual Report for Year 2020

Council Workshop
March 9, 2021
Heath Mellotte, P.E.
Design Services Manager

Complete Streets Policy Ordinance

- Adopted by City Council April 18, 2017
- Affirms Kennewick's commitment to provide safe and convenient access to all users, including pedestrians, bicyclists, motorists and public transportation.
- Requires annual report on complete streets activities

Complete Streets Constructed in 2020

2020 Kennewick Complete Streets Summary							
Project	New Sidewalks (Ft)	New ADA Ramps (Each)	New Bike Lanes & Paths (Ft)	Rect. Rapid Flash Beacon(Each)	New Ped Crossings (Each)	New Landscaping (Sq Ft)	Trip Hazards Eliminated (Each)
City-Wide Ped Improvements					7		
Development Pedestrian Impv'ts	25,951	74		7			
2020 Asphalt Overlay	85	37			1		
Pedestrian Pathway (Union to Edison)			3,200				
10th Ave. Widening (Joilet to CCB)	2,729		5,484			25,433	
Downtown Sidewalk Beveling							420
2019 RRFP School Zone Xing Grant				35			
Totals	**28,765**	**111**	**8,684**	**42**	**8**	**25,433**	**420**

KENNEWICK WASHINGTON

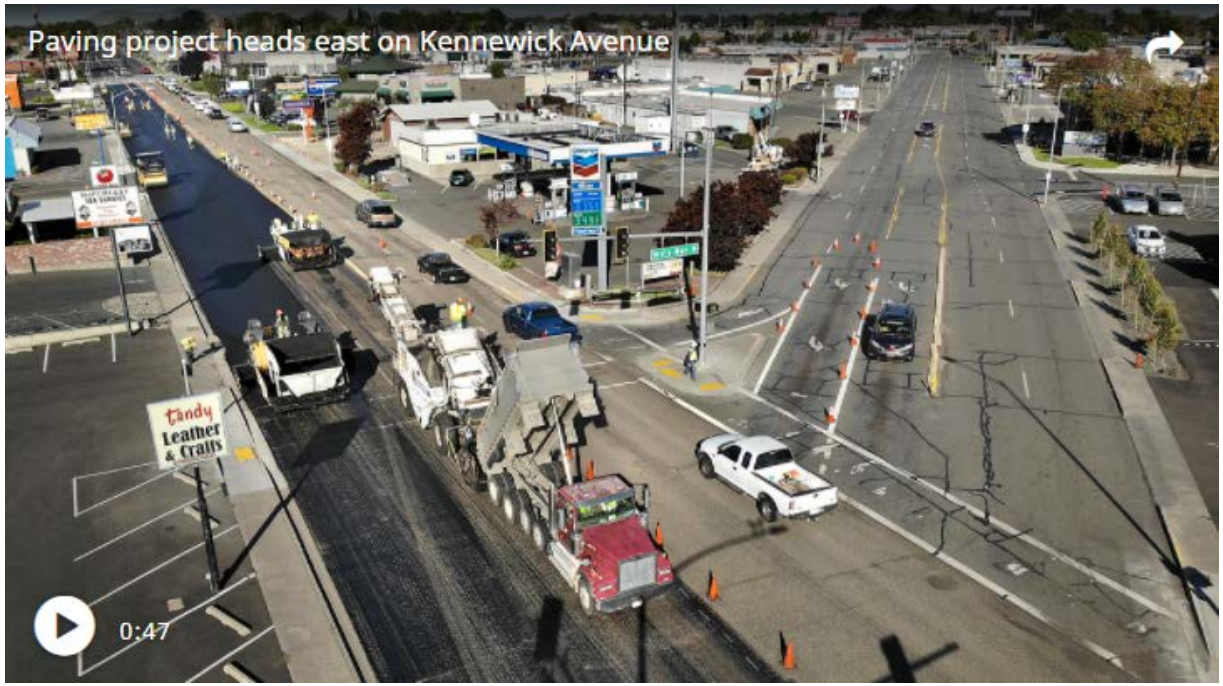
2021 Projects

- Washington Street Complete Streets project
  - $500,000 paid for by Complete Streets award
  - New wider sidewalks and landscaping
  - New RRFB Pedestrian Crossing
  - New Street Lighting
- 2021 City-Wide Asphalt Overlay
  - Southridge Blvd (Hildebrand to 27th Ave)
  - 27th Ave (Union to US 395 and US 395 to Ely)
- Pedestrian Crossing Improvements
  - Improve 15 pedestrian Xings with RRFB flashing beacons
  - $855K Federal Grant
- Photometric Data Collection & Study
  - Evaluate illumination standards for City arterials
  - $60K Federal Grant

KENNEWICK WASHINGTON

Questions?

2021 Pavement Management Program



Council Workshop – March 9, 2021

Bruce Mills, PE - Deputy Public Works Director

2021-2022
Pavement Preservation Budget

$5M total for biennium

- $2M in 2021 and $3M in 2022 after pavement rating
- 15% for BST seal coat treatments ($750k)

$247,000 in crack seal/pavement patching for 2021/2022

2020 Work Accomplished

Pavement Overlays:

- Edison Street (Hood to SR 240)
- 10th Avenue (Kellogg St to Union St)
- Hildebrand Blvd (Volland St to Canyon Lakes Dr)
- Ledbetter Street (Canyon Lakes Drive vicinity)
- Olson Street (Canyon Lakes Dr to 27th Ave)

Crack Sealing

- Contractor: Grandridge, Center Parkway, Clearwater, Deschutes, Columbia Dr
- City Street Crew: Pheasant Run sub, Whispering Winds sub

Pavement Grinding/Patching

- City Street Crew: Wheel paths (Olympia St)

2021 Proposed Work

Pavement Overlays:

- Southridge Blvd (Hildebrand to 27th)
- 27th Avenue (Southridge Blvd to US395 to Ely St) – night work

BST (Chip Seal)

- Southeast portion of City
- Washington Street (Kennewick Ave to Columbia Drive)

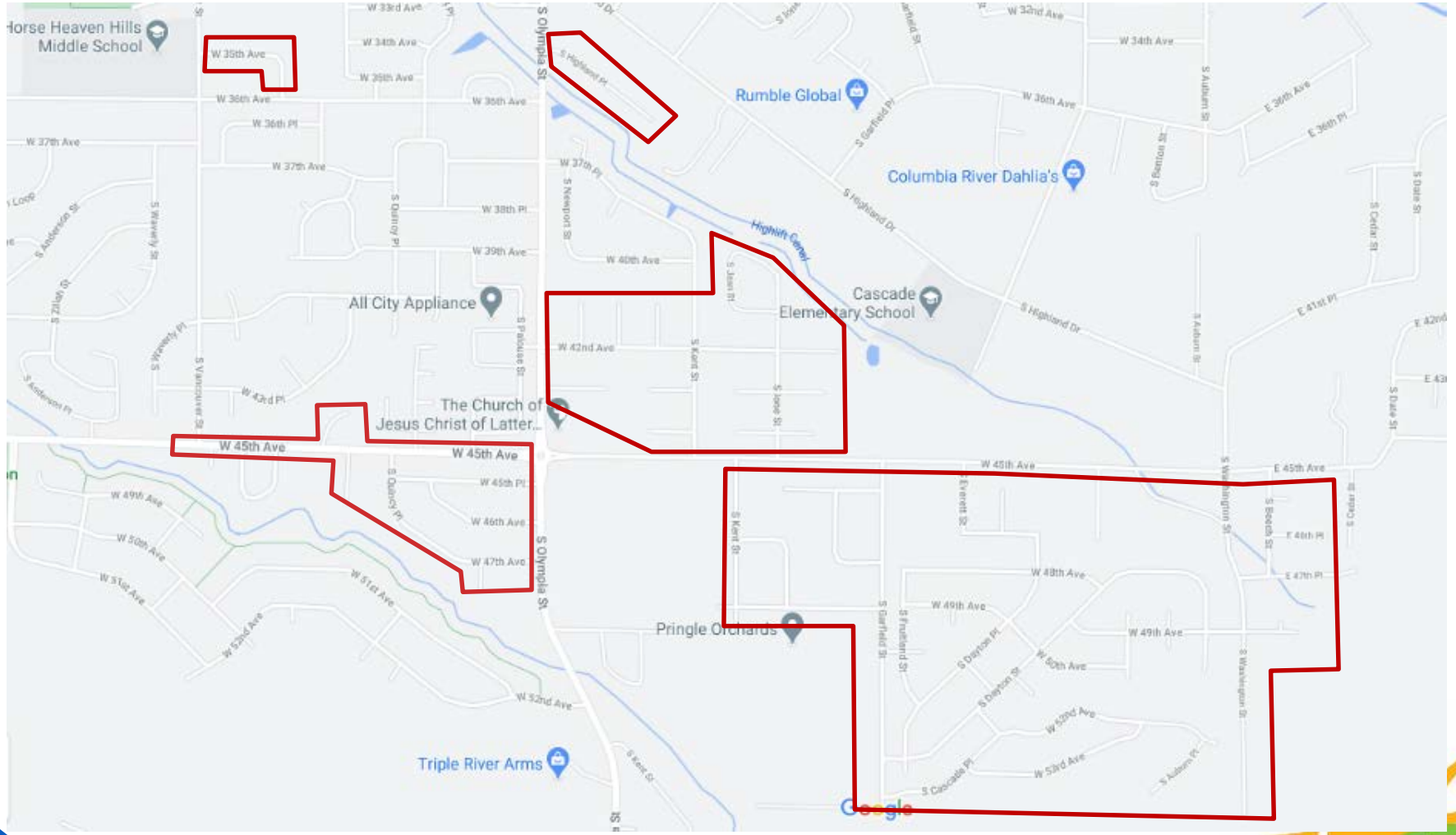
Pavement Grinding/Patching

- Vancouver Street (36th Ave to 4th Ave)
- Rainier Street

Crack Seal

- Contractor: Various arterials
- City Crews: Cherry Blossom area

Map of 2021 Proposed BST Work



Crack Seal and Pavement Patching

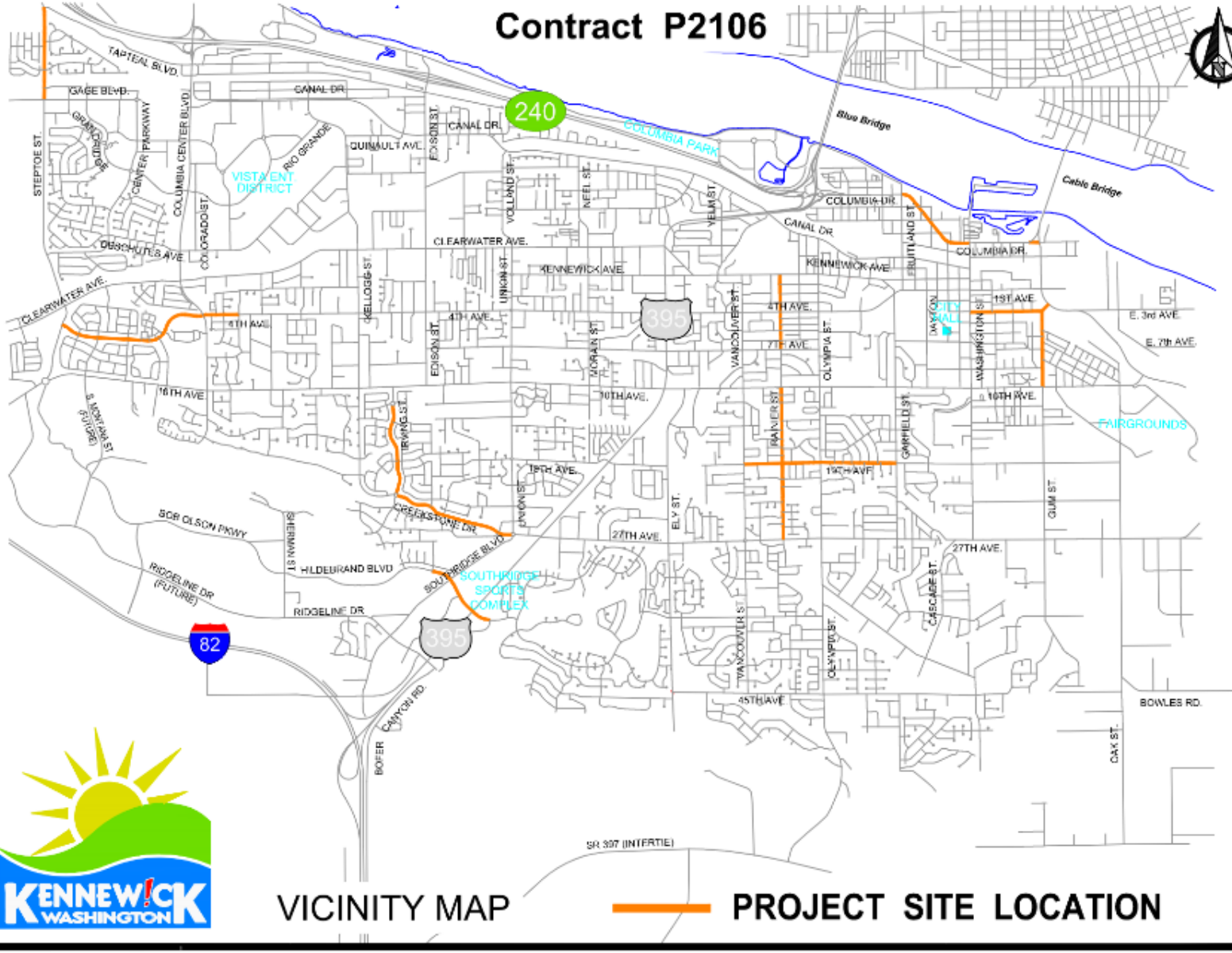
Crack Sealing

- Contractor: Arterial Streets. City Street Crew: Residential Streets

Pavement Grinding/Patching

- City Street Crew

2021 Crackseal
Contract P2106



VICINITY MAP — PROJECT SITE LOCATION

Pavement Condition Rating

- **Doing 2nd round of Pavement Condition Rating in 2021**
  - Determine ongoing condition of pavement
  - Compare with 2017 PCIs

2022 and Beyond

- **Develop/maintain list of Overlay/BST candidates**
  - Coordination with City/private utilities
  - Consider a 5-year moratorium on pavement cuts
    - Formalize practice into KMC
    - Establish approved criteria and mitigation

- **Continue crucial Overlay/BST/Crack Seal/Patching work**

Potential Future Overlay List

- Steptoe St – Gage to City Limits
- Southridge Blvd – Ridgeline to Hildebrand
- Creekstone Drive – Kellogg KID canal to Irving
- Gage Blvd – Steptoe to Center Parkway
- 10th Ave – CCB to Kellogg, Union to US395, and US395 to Quincy
- Park Hills Drive – Olympia to Garfield
- Columbia Drive – Washington to SR 397
- Grandridge – Gage to Center Parkway
- Washington – 10th to Columbia Drive; 27th to 19th

Questions?

2020 Stormwater Comprehensive Plan

Council Workshop

March 9, 2021

Bruce Mills, PE – Deputy Public Works Director

Stormwater Permit

Kennewick has an **NPDES Eastern Washington Phase II Municipal Stormwater Permit**

- insures we meet requirements of the Federal Clean Water Act
- requires stormwater entering rivers, streams, and ground water, to be free of harmful pollutants

Major requirements:

- Public Education and Outreach
- Construction Site Stormwater Runoff Control
- Illicit Discharge and Detection Elimination
- Post Construction Stormwater Management
- Municipal Operations and Maintenance

Stormwater Permit

Ecology has issued 3 permit versions for Eastern Washington:

- 2007-2012 (extended to 2014)
- 2014 – 2019
- 2019 – 2024 (current version)

Kennewick Stormwater Plans

- 1990 Comprehensive Flood Control and Stormwater Drainage Plan
- 2007 Comprehensive Stormwater Plan
- 2020 Stormwater Comprehensive Plan

Objectives of 2020 SCP

1. Assures compliance with Stormwater Permit requirements
2. Updates Stormwater Management Program Plan
3. Establishes 2021-2030 Stormwater Capital Improvement Plan
4. Resource document for City staff, engineers, contractors and developers
5. Supports growth and economic development through Stormwater planning efforts
6. Prioritizes limited financial and staff resources

2020 SCP Products

- Resource Document
- Capital Improvement Plan
- Stormwater Program Recommendations
- Permit Compliance Checklist

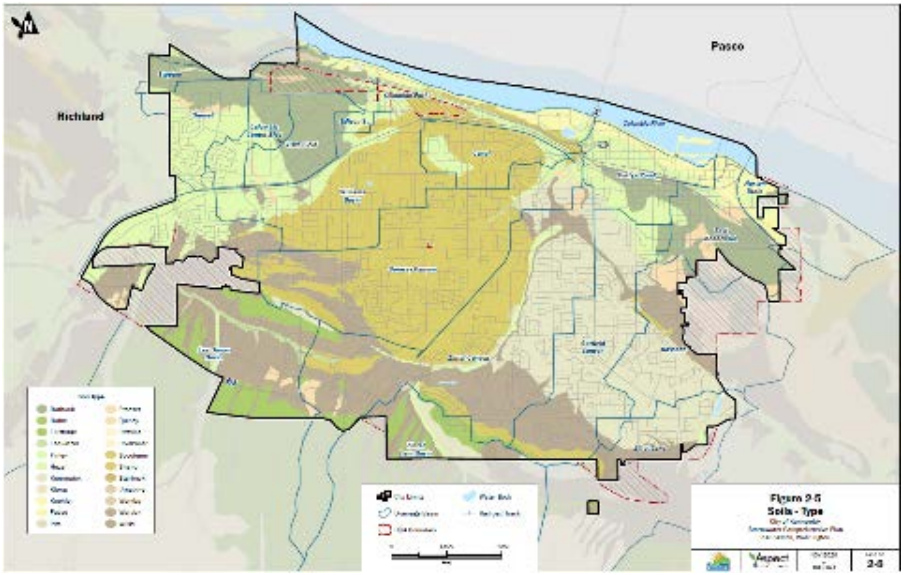
<u>Others (not in SCP Document):</u>

- Informal Audit of Program
- List of Useful Best Management Practices
- Southridge Area Regional Ponds Analysis

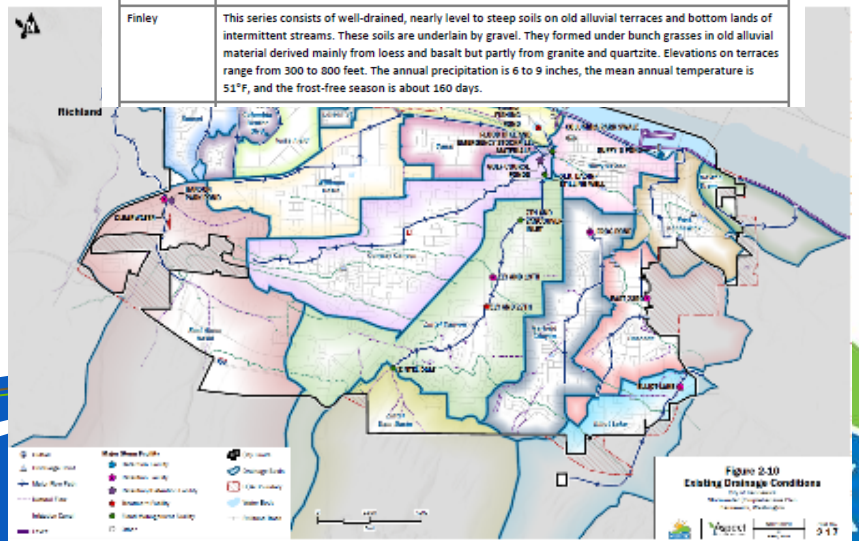
Resource Document

Maps, Soils & Infiltration Info, Sensitive Areas, Useful Links

KMC Chapter 5.56.040 refers to the City's Standard Specifications, available at: https://www.go2kennewick.com/1219/Standard-Specifications-Details. Section 5 of the Standard Specifications contains direction for the design and construction of storm drain facilities.



Soil Series	Description
Burbank	This series consists of excessively drained, coarse-textured soils on terraces along the Yakima and Columbia Rivers. These soils developed under grass and sagebrush in gravelly and stony alluvial deposits mantled with mixed alluvium and windblown sand. In some places solid basalt bedrock occurs at a depth of about 25 inches. These soils are nearly level to steep. Elevations range from 300 to 800 feet. The annual precipitation is 6 to 8 inches, the mean annual temperature is 53°F, and the frost-free season is about 180 days.
Burke	This series consists of a well-drained, shallow and moderately deep, medium-textured soils that have a hardpan. These soils occur on uplands midway up the slopes of the Rattlesnake Hills and in the Horse Heaven Hills. They developed under bunch grasses in windblown deposits of mixed origins. In most places they are underlain by basalt bedrock, but in some areas, by very gravelly material. They are gently sloping to steep. Elevations range from 1,000 to 1,300 feet. The annual precipitation is 6 to 9 inches, the mean annual temperature is 50°F, and the frost-free season is about 155 days.
Ellisforde	This series consists of well-drained, deep, medium textured soils on uplands in the northeastern part of the area. These soils developed under bunch grasses in a mantle of silty, wind-deposited material over lacustrine sediments. They are nearly level to moderately steep. Elevations range from 1,000 to 1,900 feet. The annual precipitation is 9 – 12 inches, the mean annual temperature is 50°F, and the frost free season is about 150 days.
Esquatzel	This series consists of deep, well-drained, medium-textured, nearly level to gently sloping soils on bottom lands. These soils developed under bunch grasses in alluvium. The areas are generally narrow and are incised by intermittent streams. Elevations range from 300 to 1,400 feet. The annual precipitation is 6 to 12 inches, the mean annual temperature is 50°F, and the frost-free season is about 150 days.
Finley	This series consists of well-drained, nearly level to steep soils on old alluvial terraces and bottom lands of intermittent streams. These soils are underlain by gravel. They formed under bunch grasses in old alluvial material derived mainly from loess and basalt but partly from granite and quartzite. Elevations on terraces range from 300 to 800 feet. The annual precipitation is 6 to 9 inches, the mean annual temperature is 51°F, and the frost-free season is about 160 days.



Information on Ecology's UIC program is available at: https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program. Chapter 5.6 of the SWMMEW defines site suitability, treatment requirements, and design criteria for discharges of stormwater to UIC wells. Designs for new UIC facilities are reviewed and approved by the City and Ecology. All UICs must be registered with Ecology prior to construction.

2021-2030 Stormwater CIP

Table 5.1 – City of Kennewick Stormwater Problem Areas (Current as of March 2020)

Problem Area ID	Priority	Problem Area Description
1	H	46th Ave from Ledbetter to Ely St – Install approximately 2,000 LF of storm pipe to connect isolated catch basins east to Ely St. Apply similar treatment at 47th Ave from Ledbetter to Green.
2	H	Ohrt's Subdivision southwest of 36th/Vancouver – Tie all drywells together and connect to Vancouver north of 41st. Complete downstream capacity analysis.
3	L	Outlet to Canyon Lakes Golf Course – Harden outlet and flow route through course (2809 CLD) occasional minor flows more of an annoyance to golf course. Perhaps 250 LF of pipe and energy dissipater to take care of the first fairway. Conduct LIDAR assessment for rest of course.
4	L	26th Place from Garfield to 27th – Needs curbing and drainage as well as road replaced. This is primarily driven by poor road surface. The stormwater system is cobbled together with no curb and gutter.
5	L	21st Ave – Install pipe from Columbia Irrigation District (CID) canal to Washington St; assess Washington St outfall capacity south and e
6	M	1
7	M	R b
8	H	R a
9	H	B
10	M	F
11	L	Z b F
12	M	K t
13	L	C h
14	H	7 s C

Problem Area ID	Priority	Problem Area Description
15	L	Canal St outfall – Replace from Volland to Columbia River.
16	L	Disconnect Quinault stormwater system from the Columbia Center Mall system. Consider use of infiltration and only allowing overflow from the roadway system to the mall.
17	H	Cherry Blossom Heights Subdivision at 19th and Union – Add more catch basins to reduce plugging of grates.
18	L	Construct hardened access from roadway to drywells at back of Panoramic Heights Clubhouse (5502 W 25th Ave). City crews currently have to drive over grass to access drywells.
19	H	Hansen Park Regional Pond at Steptoe and 4th – City to determine maintenance responsibilities; reopen outfall to KID canal and address chronic beaver problem.
20	H	Creekstone Subdivision in vicinity of 23rd and Kellogg – City awaiting geotechnical study report. Replace failed infiltration trench due to residents overwatering. Will likely include removal of native soil and infiltration trench, replacement with crushed rock, and asphalt patching.
21	H	Ridgeline Drive from Sherman to Southridge – City to work out shared pond/conveyance partnership with Kennewick School District and developers for proposed stormwater pond at Southridge High School ball field.
22	H	Southridge Area – Site regional ponds for future growth from Badger to US 395 along Bob Olson/Hildebrand and Ridgeline. Build upon PBS work from 2019 Southridge Area Stormwater Master Plan, which addressed area east of Amon Canyon.
23	L	Disconnect all known City outfalls to CID canal – List includes 16 locations. Will include retention and infiltration of runoff up to the 100-year 24-hour storm event with excess flows to overflow to the CID canal.
24	H	Vancouver – Extend line from drywell at Vancouver/Waverly to Vancouver Meadows MH. City has details.

2021-2030 Stormwater CIP

Table 5.4 – City of Kennewick 10-Year Stormwater CIP

CIP Project No.	Project Description	Present Worth Cost [1]	Total Escalated Cost [2]	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031 – 2040
	High Priority Improvements													
---	Zintel Canyon Dam - Patch West Training Wall	25,000	25,758	25,758	-	-	-	-	-	-	-	-	-	-
20	Creekstone Trench Repair	50,000	51,515	51,515	-	-	-	-	-	-	-	-	-	-
9	Garfield St - Blackberry Canyon Outlet to W 14th Pl	423,479	436,310	436,310	-	-	-	-	-	-	-	-	-	-
1	46th / 47th Ave - Ledbetter to Ely St / Green - Storm Pipe and Manholes	772,645	796,056	796,056	-	-	-	-	-	-	-	-	-	-
2	Ohrt's Addition Subdivision - Install Storm System to Vancouver St	1,447,848	1,546,031	155,658	920,090	470,283	-	-	-	-	-	-	-	-
8	Park Hills Dr Storm System Replacement	735,793	802,254	-	81,502	720,752	-	-	-	-	-	-	-	-
17	Cherry Blossom Heights - 19th Ave / Union St Catch Basins	193,281	217,125	-	-	22,060	195,065	-	-	-	-	-	-	-
19	Hansen Park Regional Pond Maint Resp - Steptoe Ave / 4th St	30,000	33,639	-	-	5,468	28,171	-	-	-	-	-	-	-
24	Vancouver St Storm Pipe	91,418	102,515	-	-	16,405	86,109	-	-	-	-	-	-	-
21	Ridgeline Dr - Sherman to W 36th Pl - City/School District Regional SW Solution	430,000	483,539	-	-	32,810	450,728	-	-	-	-	-	-	-
14a	7th Ave Outfall Study - Creekstone to Golf Course	100,000	112,682	-	-	-	112,682	-	-	-	-	-	-	-
14b	7th Ave Outfall - New Regional Infiltration Facility	2,056,055	2,414,374	-	-	-	191,560	1,094,821	1,127,994	-	-	-	-	-
	Medium Priority Improvements													
10	Frog Pond Rehabilitation	30,000	33,805	-	-	-	33,805	-	-	-	-	-	-	-
6	14th Ave - Garfield to CID Canal	240,000	286,370	-	-	-	-	23,219	263,151	-	-	-	-	-
12	Kennewick Ave / Rainer St Storm Pipe Access Manholes	440,000	557,185	-	-	-	-	-	-	49,295	507,890	-	-	-
7a	Outfall to Duffy's Pond Phase 1 - SR397 / Kenn Ave Storm Pipe	430,000	544,861	-	-	-	-	-	-	36,972	507,890	-	-	-
7b	Outfall to Duffy's Pond Phase 2 - 10th Ave / Date St to SR397 / Kenn Ave Storm Pipe	1,070,000	1,416,897	-	-	-	-	-	-	-	88,881	654,099	673,918	-
	Low Priority Improvements													
5	W 21st Ave - CID Canal to Wash - Storm Pipe and Manholes	370,000	497,906	-	-	-	-	-	-	-	-	26,164	471,743	-
3	Outfall to Canyon Lakes Golf Course - Storm Pipe and Energy Dissipator	100,000	123,238	-	-	-	-	-	-	123,238	-	-	-	-
11	Zintel Canyon - KID Outfall Erosion Prevention	10,000	12,324	-	-	-	-	-	-	12,324	-	-	-	-
18	Panoramic Heights Clubhouse - Hardened Access to Drywells	12,500	15,405	-	-	-	-	-	-	15,405	-	-	-	-
4	26th Pl - Garfield St to 27th Ave - Storm System and Road Surfacing	340,000	430,213	-	-	-	-	-	-	49,295	380,917	-	-	-
23	Disconnect Outfalls to CID Canal at 16 Locations	600,000	762,174	-	-	-	-	-	-	369,715	-	392,459	-	-
16	Disconnect Quinault St Stormwater System to Columbia Center Mall	220,000	295,731	-	-	-	-	-	-	-	-	26,164	269,567	-
13	Columbia Dr - US395 / US397 - Replace CMP Storm Trunk Line	1,070,000	1,549,635	-	-	-	-	-	-	-	-	-	-	1,549,635
15	Canal St Piped Outfall - Volland St to Columbia River	1,320,000	1,853,397	-	-	-	-	-	-	-	-	-	161,740	1,691,656
	Storm System R&R, Stormwater WQ / LID Retrofits, Other													
---	Stormwater Public / Private Partnerships (Regional Pond / Conveyance)	975,000	1,362,702	25,758	53,076	54,684	56,341	58,048	59,807	61,619	63,486	65,410	67,392	797,081
---	Drywell / Misc Storm System Improvements	3,000,000	4,165,378	154,545	159,228	164,052	169,023	174,144	179,421	184,858	190,459	196,230	202,175	2,391,243
---	Wellhead Area Stormwater Treatment Retrofits	-	-	-	-	-	-	-	-	-	-	-	-	-
---	Low Impact Development Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
---	Transfer to Equipment Rental	350,000	376,451	103,030	-	273,421	-	-	-	-	-	-	-	-
	Total Capital Cost	**16,933,020**	**21,305,470**	**1,748,630**	**1,213,900**	**1,759,940**	**1,323,480**	**1,350,230**	**1,630,370**	**902,720**	**1,739,520**	**1,360,530**	**1,846,530**	**6,429,620**
	10-Year Average Capital Cost	**1,487,600**												

[1] Present Worth Cost expressed in 2020 dollars.

[2] Total Escalated Cost calculated using 10-year average Construction Cost Inflation (CCI) of 3.03 percent compounded to anticipated year(s) of project implementation.

2021-2030 Stormwater CIP

PROJECT INFORMATION

Project Name: CIP #8 – Park Hills Dr Storm Drain Rehabilitation

Project Location: Along W Park Hills Dr between S Olympia St and S Garfield St

EXISTING CONDITIONS AND DRAINAGE ISSUES

The existing storm drain pipe along W Park Hills Dr is undersized and deteriorating. I
the existing drywell at W 14th Pl and W 15th Pl is full of stormwater, bypass runoff bu
south-eastern catch basin causing increased runoff and localized flooding along the
W 14th Pl.

HYDROLOGY

The local drainage area is approximately 84.4 acres. Planning level hydrology is sum

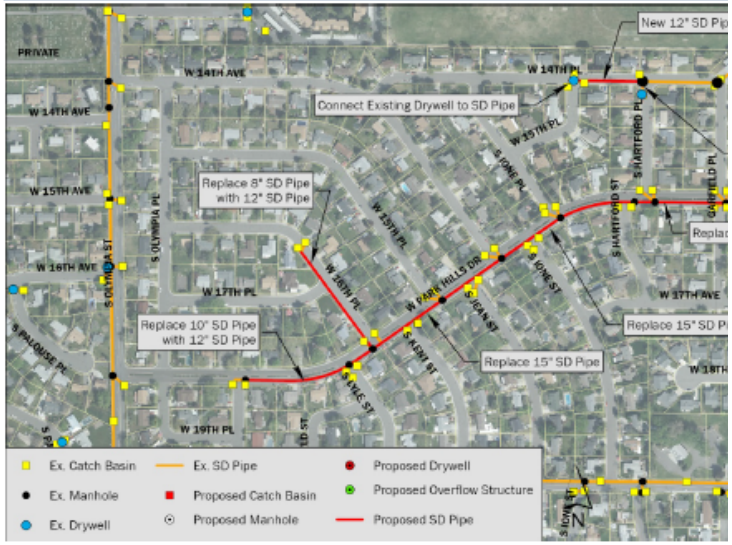
25-Year, 24-Hour Storm Event (1.70 in)		100-Year, 24-Hour Storm Ev	
Peak Flow (cfs)	Volume (cf)	Peak Flow (cfs)	Vo
8.65	189,150	10.70	2

*Infiltration/detention capacity of existing drywells within the basin are not included in the planning le

PROPOSED SOLUTION

Replace the existing deteriorating storm drain pipe along W Park Hills Dr with new st
(note that some segments may be amenable to sleeving). Select branches of the sto
upsized to comply with current City minimum pipe size requirements. In addition, a
pipe will connect the existing drywell at W 14th Pl and W 15th Pl to the existing storm
Pl and S Hartford Pl allowing for excess stormwater to be safely routed to the S Garfi
system. These improvements will assure the structural integrity of Park Hills Drive ar
from flooding in the event of pipe failure.

LOCATION MAP



DOWNSTREAM ANALYSIS

In the existing condition, all runoff flowing to W Park Hill Dr flows to down to the intersection of W Park Hills Dr and S Garfield St via existing storm pipes and/or curb and gutter and enters the existing storm drain system on S Garfield St. In the proposed condition, the replaced storm pipes are estimated to contain the 25-year and 100-year peak flows, without surcharging any catch basins and causing excess runoff to flow along the curb and gutter, prior to entering the existing storm drain system on S Garfield St.

In the existing condition, runoff flowing along W 14th Pl flows to down to the intersection of W 14th Pl and Garfield Pl via existing curb and gutter and enters the existing storm drain system on Garfield Pl. In the proposed condition, the new/existing storm pipes are estimated to contain the 25-year peak flows, without surcharging any catch basins and causing excess runoff to flow along the curb and gutter, prior to entering the existing storm drain system on Garfield Pl. No additional runoff will be added to the existing downstream system.

PRELIMINARY COST ESTIMATE

CIP #8 - Park Hills Dr Storm Drain Rehabilitation				Planning Level Cost Estimate	
	DESCRIPTION OF ITEM	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1	Mobilization	LS	1	$ 51,190.00	$ 51,190.00
2	SPCC Plan	LS	1	$ 1,000.00	$ 1,000.00
3	Erosion / Water Pollution Control	FA	EST	$ 5,000.00	$ 5,000.00
4	Project Temporary Traffic Control/Signage	LS	1	$ 64,000.00	$ 64,000.00
5	Structure Excavation Class B Incl. Haul	CY	2,835	$ 30.00	$ 85,050.00
6	Crushed Surfacing Top Course	TON	392	$ 40.00	$ 15,684.00
7	HMA Cl 1/2 in. PG 64-28	TON	146	$ 140.00	$ 20,482.00
8	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	LF	1,335	$ 40.00	$ 53,400.00
9	Solid Wall PVC Storm Sewer Pipe 15 In. Diam.	LF	1,320	$ 50.00	$ 66,000.00
10	Solid Wall PVC Storm Sewer Pipe 18 In. Diam.	LF	455	$ 60.00	$ 27,300.00
11	Connection to Drainage Structure	EA	3	$ 500.00	$ 1,500.00
12	Gravel Backfill for Pipe Zone Bedding	CY	2,425	$ 50.00	$ 121,250.00
				CONSTRUCTION SUBTOTAL	**$ 511,856.00**
				Engineering/Administration (15%)	$ 76,778.40
				SUBTOTAL	**$ 588,634.40**
				Contingency (25%)	**$ 147,158.60**
				TOTAL	**$ 735,793.00**

Program Recommendations

Table ES.1 – SCP Action Items and Recommendations

Recommended SCP Action Items
Section 2 – City Stormwater Drainage System
Occasional Flooding
✓ Continue to provide increased maintenance and replacement of conveyance experienced partial failure during larger storm events.
✓ Regularly seek and compile input from City crews and prioritize and replace f
Age and Condition of Pipe
✓ Continue to inventory the age and material of pipe and log it into a GIS map l
✓ Track clogged storm pipes in an electronic database.
✓ Create a prioritized list of pipes that needs attention through spot
✓ Perform TV inspections in areas with older stormwater pipe on an
Comingling with Irrigation Water
✓ Disconnect stormwater flows from irrigation canals (delivery syste
✓ Where disconnection is not possible, treat the stormwater throug irrigation canals.
✓ Prioritize irrigation canal connections and continue to disconnect
Variability of Soils – Regional Stormwater Ponds
✓ Continue to work closely with the development community to esta adequate infiltration.
✓ When necessary, consider the City being a financial partner and ut developers to work together towards common and mutually bene
✓ Continue site/area specific studies to analyze optimal locations for developing areas.
Failing Drywells
✓ Continue to require new development to perform infiltration testi drywells and require that drywells and other infiltration facilities b
✓ Continue to update the compilation of failing drywell locations.
✓ Continue to prioritize, schedule, and replace failing drywells as a p
Illicit Connections and Discharges
✓ Continue to TV all City stormwater pipelines to discover illicit conn
✓ Continue to implement the City's Illicit Discharge Detection Elimini

Recommended SCP Action Items
Section 3 – Regulatory Requirements

2019 NPDES Phase II Permit

✓ Meet key deadlines within the City's NPDES Phase II Permit.

Permit Section	Requirement	Deadline
S5.A	Develop and implement a SWMP during the Permit term	By 2024
S5.A.6.B	Provide description of internal coordination mechanisms with Annual Report	By March 31, 2021
S5.B.1.b	Measure one target audience in one subject area	By December 31, 2021
S5.2.b	Post Annual Report on website	By May 31 of each year
S5.3.a	Update MS4 map; GIS-based format required for all mapping after Aug 1, 2021	By August 1, 2023
S5.3.b.vii	Revise IDDE Ordinance to comply with Permit section requirements	By February 2, 2023

Recommended SCP Action Items
Section 6 – Future Stormwater Program Recommendations

Program Funding

- ✓ Continue to provide dedicated stormwater utility funding to support the City's stormwater compliance, O&M, and capital project needs.
- ✓ Continue to seek stormwater grant funding as opportunities and staff time allows.
- ✓ Target to perform a stormwater utility rate study at least every five years to reassess program needs and adequacy of funding.
- ✓ When resources allow, undertake an examination of other fee methodologies.

Program Staffing and Resources

- ✓ Per the 2017 stormwater utility rate study, hire a full-time stormwater position in the near future to better track the program and provide office support.
- ✓ Prudently budget for the timely replacement of equipment as it reaches its useful life.
- ✓ Based on accomplishment of performance measures, consider acquisition of additional equipment in the future.

Additional Recommendations

- ✓ Update the SCP at least every ten years.
- ✓ Review and revise Section 4, the SWMP Plan, annually and whenever the Phase II Permit is renewed by Ecology.

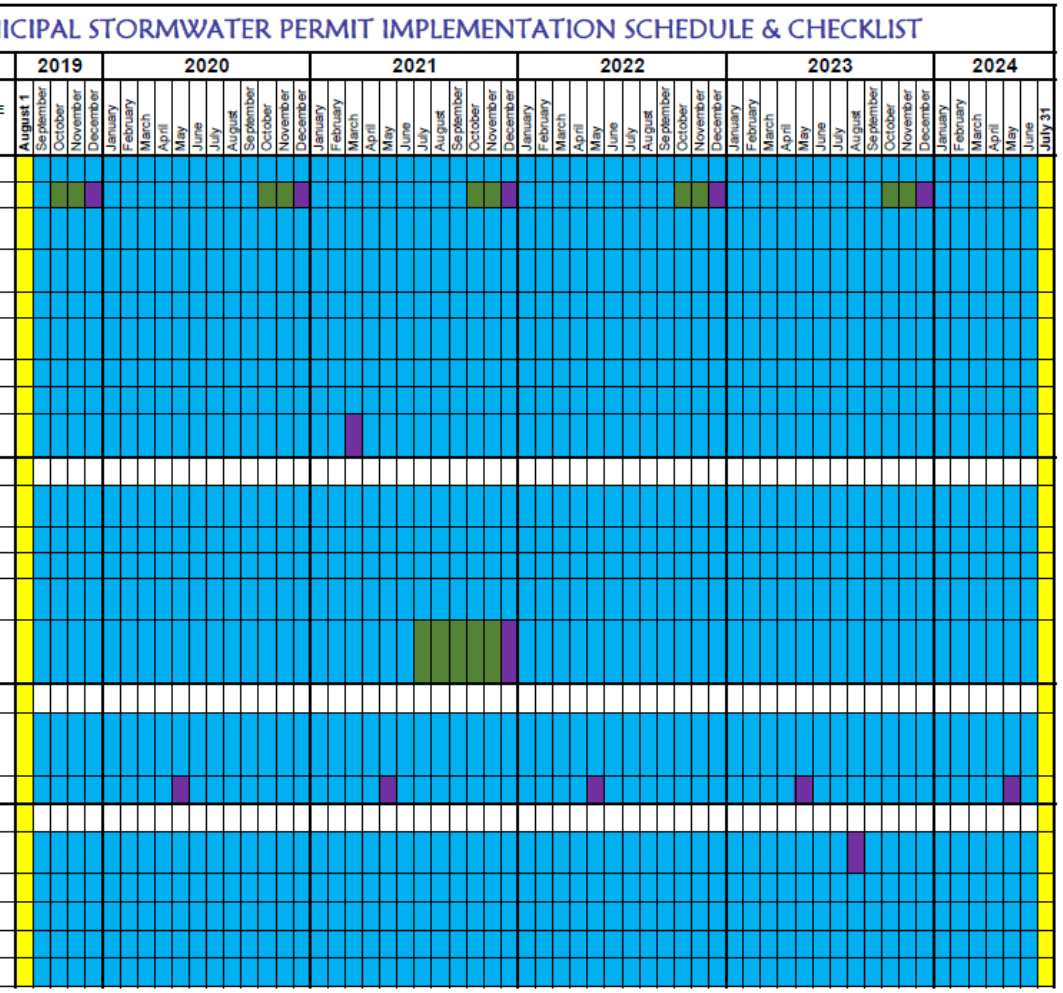
Permit Compliance Checklist

LEGEND:

- Effective & Expiration Dates of Permit
- Ongoing Requirement
- Permit Deadline
- Prep Work
- Area of Concern; Refer to 2020 ***NPDES II Program Review Memo*** for compliance recommendations

EASTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT IMPLEMENTATION SCHEDULE & CHECKLIST

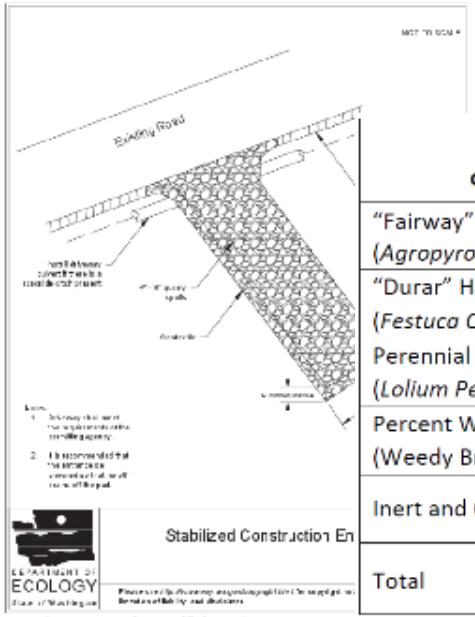
CHAPTER	SECTION	SUB-SECTION	TASKS	RESPONSIBLE DEPT / DIV
S5	A.1	3	Implement existing SWMP until begin implementation of updated SWMP	
		4	Update SWMP Plan annually; submit with Annual Report	
		5.a	Implement ongoing program for gathering, tracking, maintaining info to evaluate SWMP dev & implementation and permit compliance	
		5.a.i	Track inspections performed, follow-up actions, enforcement actions, PE&O activities, etc.; include summary in Annual Report	
		5.a.ii	Track estimated cost of dev and implementation of SWMP components	
		6.a	SWMP to include mechanisms to encourage coordinated stormwater-related policies, programs, and projects between entities under Permit	
		6.a.i	Coordination mechanism(s) to clarify roles and responsibilities	
		6.a.ii	Coordination mech to avoid conflicting plans, policies, & regulations	
		6.b	SWMP to include internal coordination mechanisms between departments; include written description in Annual Report	
	B.1		**Public Education and Outreach**	
		a.	Implement PE&O Program; provide subject area material on an ongoing or strategic sched based on land uses and priority target audiences	
		a.i	TA - General public; provide appropriate subject area info	
		a.ii	TA - Businesses; provide appropriate subject area info	
		a.iii	TA - Engineers, developers, contractors, dev review staff, etc.; provide appropriate subject area info	
		b.	Measure understanding and adoption of targeted behaviors for at least one target audience in at least one subject area; use results to direct ongoing PE&O resources and assess changes in targeted behaviors	
	B.2		**Public Involvement and Participation**	
		a.	Implement program/policy to create opportunities for public to provide input during dev, refine, impl of SWMP, updates to ordinances, etc.	
		b.	Post on website current SWMP Plan and Annual Report	
	B.3		**Illicit Discharge Detection and Elimination Program**	
		a.	Maintain/periodically update map of MS4; revise/update map to meet requirements of Section S5.B.3.a	
		a.i	Known outfalls and known discharge points	
		a.i.(a)	Attribute data for outfalls to include size and material, maint records	
		a.ii	Receiving waters other than ground	
		a.iii	Areas served by MS4 that discharge to ground	



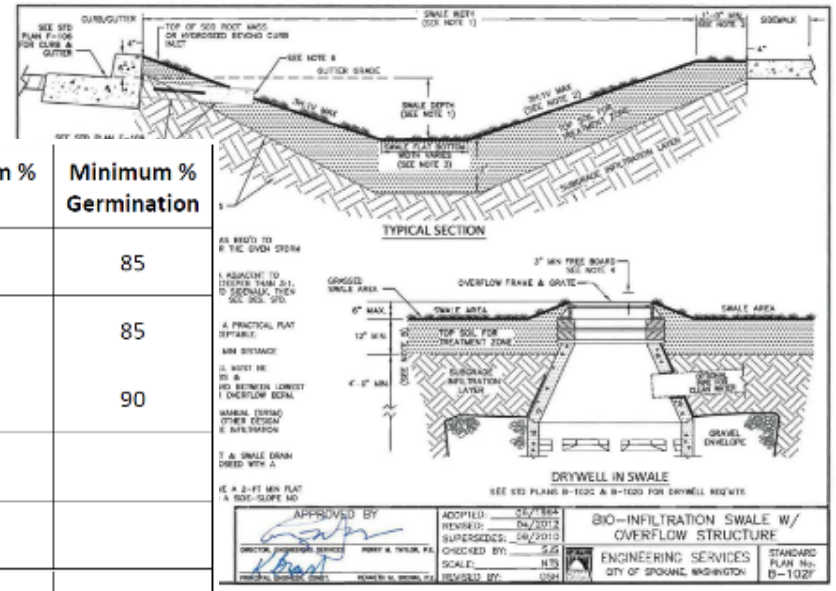
Other Products

Informal Program Review Audit

Best Management Practices Compilation



Kind and Variety of Seed in Mixture	Seeding Rate (lbs/acre)	Minimum % Seed	Minimum % Germination
"Fairway" Crested Wheat Grass (*Agropyron Cristatum*)	27	54.0	85
"Durar" Hard Fescus (*Festuca Ovina Duriuscal*)	13.5	28.5	85
Perennial Ryegrass (*Lolium Perenne*)	4.5	9.8	90
Percent Weed Seed (Max) (Weedy Bromus Species - 1% Max)		2.0	
Inert and Other Crop		5.7	
Total	45	100	



ltration Swale (Source: City of Spokane Standard Plans, 2019,
lio-Infiltration Swale w/ Overflow Structure)

Other Products

Southridge Area Regional Stormwater Ponds Analysis

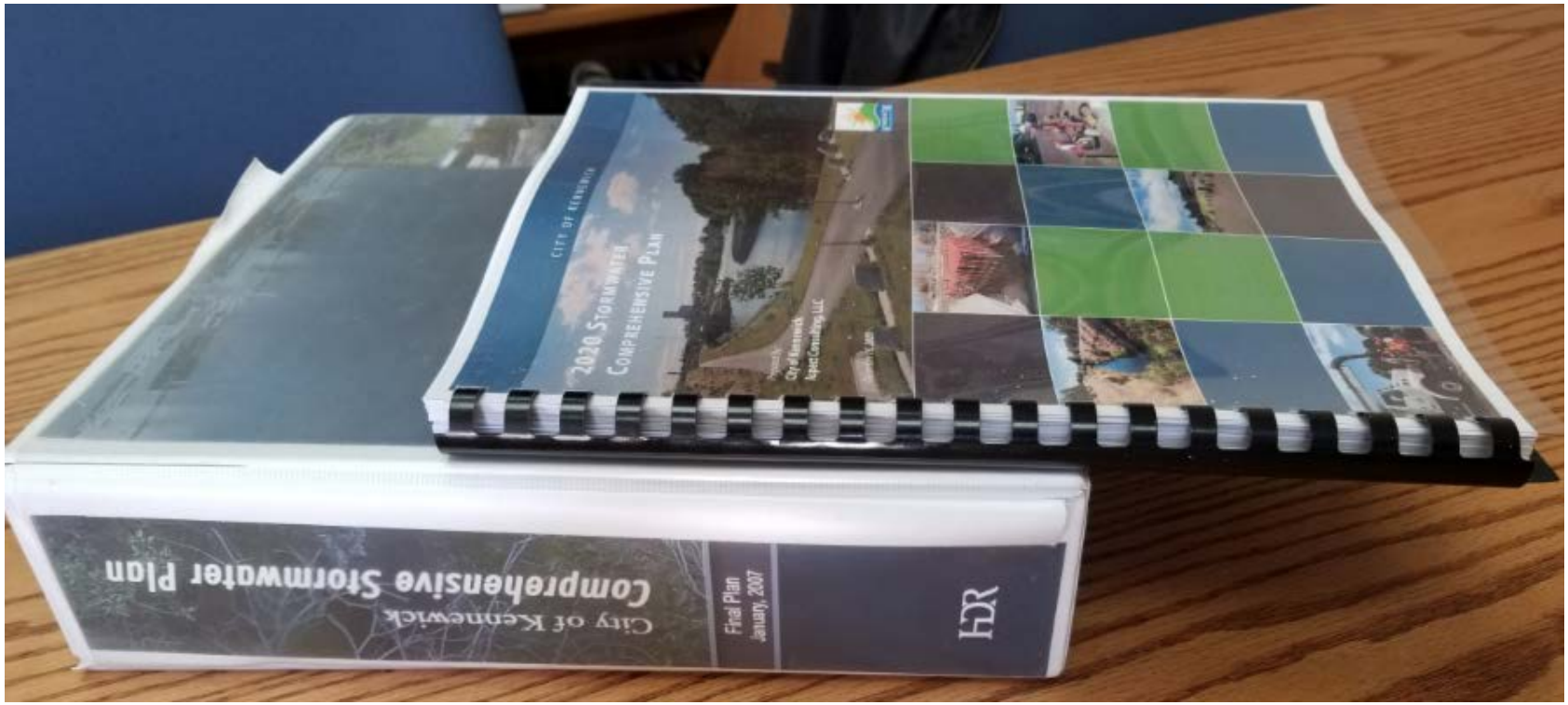
Summary Observations

Kennewick's Stormwater Management Program is in good shape, and in compliance with Permit requirements.

The program is adequately funded for implementation of top priorities.

Implementing *Recommended SCP Action Items*, compiled in the Executive Summary of the SCP, will assure continued compliance and success.

Bigger Not Always Better



https://www.go2kennewick.com/DocumentCenter/View/12399/2020-Stormwater-Comprehensive-Plan

Questions?

City Council Meeting Schedule April 2021

City Council temporarily designated the location for regular, special and study session meetings to a virtual location until termination of the state of emergency or until rescinded. The City broadcasts City Council meetings on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts.

April 6, 2021
Tuesday, 6:30 p.m. — REGULAR COUNCIL MEETING

April 13, 2021
Tuesday, 6:30 p.m. — WORKSHOP MEETING (the workshop meeting will be done via Zoom and broadcast on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts)

1. KPD Foundation Update
2. Waste Management Update
3. Shoreline Master Plan Update

April 20, 2021
Tuesday, 6:30 p.m. — REGULAR COUNCIL MEETING

April 27, 2021
Tuesday, 6:30 p.m. — WORKSHOP MEETING (the workshop meeting will be done via Zoom and broadcast on the City's website https://www.go2kennewick.com/CouncilMeetingBroadcasts)

1. 2020 Year-End Financial Review/Spring Budget Adjustment
2. Police Department Annual Update
3. Fire Department Annual Update

To assure disabled persons the opportunity to participate in or benefit from City services, please provide twenty-four (24) hour advance notice for additional arrangements to reasonably accommodate special needs.

Please be advised that all Kennewick City Council Meetings are Audio and Video Taped