North Branch Park River Watershed
Comprehensive Flood Damage Reduction
Purpose and Project Goals
December 16, 2014 - DRAFT

Prepared by:
Park River Joint Water Resource District
North Branch Park River/Cart Creek Stakeholders Committee

In cooperation with Houston Engineering, Inc.

1. Watershed Background

The Park River Watershed encompasses approximately 990 square miles of the Red River Basin, and resides primarily in three North Dakota counties; Cavalier, Pembina, and Walsh. This area in relation to the Red River Basin is illustrated on **Attachment 1**. Much of the Park River Watershed is comprised of three branches, combining near the community of Grafton, ND. The area contributing to the South Branch and Middle Branch encompasses approximately 403 square miles. A structure was recently completed along the Middle Branch that detains approximately 3.2 inches of runoff when combined with other existing upstream flood water impoundments. The South Branch has limited capacity to detain runoff in impoundment structures, and often contributes to flooding experienced on lower portions of the Park River. The area contributing to the North Branch encompasses 258 square miles, including the flood prone Cart Creek tributary. Currently, there are no impoundments in the North Branch Watershed. Substantial flood damages in this region often occur during both spring runoff and summer rainfall events, as was evident during the spring of 2013. Refer to **Attachment 2** for an illustration of the three branches of the Park River Watershed and the locations of existing impoundment structures.

2. Public Comment Solicitation

On July 1, 2014, the Park River Joint Water Resource District (PRJWRD) hosted a public comment meeting in Mountain, ND for residents and landowners in the North Branch Watershed. This meeting focused on gathering information to better define the existing flood problems and potential solutions. Information was also gathered with regard to locally perceived causes and solutions to flooding in the region. Approximately 80 people were in attendance at this meeting. Questionnaires were provided at the meeting, as well as direct mailed to invited landowners. Approximately 35 completed questionnaires have been provided back to the PRJWRD. This information was used to better define the *Problem Statement* discussed in Section 3 and *Expected Outcomes* discussed in Section 4. These comments are summarized in **Attachment 4**.

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3. Problem Statement

The North Branch of the Park River and its tributaries has long been recognized as an area of concern for flooding by the Walsh, Pembina, and Cavalier County Water Resource Districts. Flooding within this region was especially problematic during the spring and summer of 2013. Above average spring and early summer runoff was experienced throughout the watershed. Widespread flooding was experienced by those residing along the North Branch, Cart Creek, and at points further downstream along the Park River. Flooding impacted rural residents in the area as well many of the communities within the region. This area lacks a comprehensive flood mitigation plan to reduce flood risks for impacted residents.

3.1. Local Scale Problems – *North Branch Park River Watershed*

Both spring and summer flooding results in a multitude of problems within the North Branch watershed. Steep slopes in the upper portions of the watershed result in runoff traveling quickly to the lower portions of the watershed, where slopes begin to flatten out. This often results in expansive areas becoming inundated with excessive runoff. High flows also cause substantial damages to the landscape as a result of erosion. In the last 10-years, FEMA declarations for the townships in question have occurred in 2004, 2005, 2006, 2009, 2011, and 2013. More specific information on problems within the North Branch watershed are summarized as follows. **Attachment 3** illustrates the FEMA regulatory floodplain extents as well as the drainage boundary for the North Branch Park River Watershed.

3.1.1. Communities

The community of Crystal, ND is within the North Branch watershed and currently lacks adequate flood protection. This increased flood risk results in impacts to residential, industrial, and infrastructure within Crystal, ND.

3.1.2. Rural

3.1.2.1. Residences

In addition to the communities previously described, risk for flood damages exist for residents living within flood prone areas along the North Branch and its tributaries. This flood risk has potential to result in loss or damage to personal property, and in extreme events, potentially loss of life.

3.1.2.2. Infrastructure

Flooding along the North Branch Park River and Cart Creek has resulted in substantial damages to rural infrastructure, such as existing drainage systems, roadways, and stream crossings. This was extremely apparent during the spring and summer of 2013, where the region was impacted by rapid spring snow melt and severe spring rains. Increased flows resulted in roads overtopping in many location, with several of these locations “washing out”. The increased flows also resulted in damages to many public and private drainage systems in the region. These damages are not limited to the spring of 2013 and are experienced frequently during periods of high flows.

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3.1.3. Agricultural

Flooding of agricultural lands along the North Branch of the Park River and its tributaries is a frequent problem. Prolonged inundation of cropland leads to delayed planting dates in the area resulting in reduced yields for area producers. Additionally, high flows result in large amounts of erosion occurring on agricultural land within the area.

3.2. Regional Scale Problems – *Park River Watershed*

Flooding within the Park River Watershed, particularly in Walsh and Pembina Counties, has been a persistent problem for residents in the region. The community of Grafton, ND is located downstream of the confluences of the three Branches of the Park River watershed. A substantial portion of Grafton is located in the regulatory 100-year flood plain, and has led to the evaluation of several potential solutions to alleviate flood risk for the community. While these potential solutions have focused on reducing flood risk for residents within Grafton, ND, they haven't evaluated potential comprehensive solutions to reduce flood risk for area residents living outside of the community of Grafton, ND. Other communities, such as Crystal, Mountain, and Hoople, also deal with flooding during periods of high runoff. With the primary industry of the region consisting of agriculture, losses experienced as a result of flooded agricultural lands are also felt by the area. **Attachment 3** illustrates the FEMA regulatory floodplain extents within the Park River Watershed.

3.3. Red River Basin Wide Scale Problems

Runoff produced from the Park River Watershed contributes to the Red River Basin. The Red River Basin is an international, multi-jurisdictional watershed of approximately 45,000 square miles, with 80% of the Basin contained within the United States, and the remaining 20% of the Basin located in Canada. Flooding along the Red River and its tributaries is a prolonged issue for the region. Substantial damages are often experienced during periods of excessive runoff. Impacts experienced along the Red River mainstem are a result of combined tributary subwatershed contributions (including the Park River Watershed).

4. Project Purpose & Expected Outcomes

The North Branch Park River project will focus on primary benefit to local scale problems outlined in Section 3.1. Any benefit provided to the problems outlined in Sections 3.2 and 3.3 will be considered secondary, and not a primary focus for alternative analysis. Rather, potential alternatives will be recognized if secondary benefit is given to these problems. Strategies or alternatives that will result in potentially more severe downstream flooding along the Park River and potential to increase contributions to the Red River will not be considered.

4.1. Local Scale Purpose – *North Branch Watershed*

Project components of the North Branch Park River Flood Damage Reduction project will reduce flood risk for local communities, rural residences and infrastructure, and the agricultural community within the project watershed. The provided benefit is directly related to the locally acceptable amount of flood risk.

4.1.1. Expected Outcome No. 1 (Primary) – *Reduce Flood Risk for Crystal, ND*

- *Provide 100-year flood protection.*

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4.1.2. Expected Outcome No. 2 (Primary) – *Reduce Flood Risk for Rural Residences*

- *Reduce flows along Cart Creek to minimize breakouts and overland flooding.*

4.1.3. Expected Outcome No. 3 (Primary) – *Reduce Flood Risk for Rural Infrastructure*

- *Reduce the frequency of road overtopping and washouts.*

4.1.4. Expected Outcome No. 4 (Primary) – *Reduce Impacts to Agriculture*

- *Reduce peak flows and duration of flooding along Cart Creek to reduce flooding and erosion of land in agricultural production*

4.2. Regional Scale Purpose

The North Branch Park River project will provide benefits to the Park River Watershed downstream of where the three branches of the Park River combine. The project will not incorporate any features that could increase the rate of runoff from the North Branch Park River, and potentially increase the severity of downstream flows.

4.2.1. Expected Outcome No. 5 (Secondary) – *Regional*

The project will reduce the magnitude of flooding from the North Branch Park River to the Park River mainstem. No alternatives will be considered that will result in increased downstream flows and potential adverse impacts as a result of the project. This will provide impacted interests along the Park River mainstem, including the community of Grafton, ND, reduced impacts as a result of flooding in the North Branch Watershed.

4.3. Red River Basin Wide Scale Purpose

As part of the Red River Basin Commission's Long Term Flood Solutions for the Red River Basin (RRBC LTFS), peak flow and runoff volume reduction goals were established to reduce Red River main stem flooding by approximately twenty percent. To achieve this goal, individual tributary goals were generally to provide 35%± peak flow reduction and 15-20%± overall volume reduction.

4.3.1. Expected Outcome No. 6 (Secondary) – *Basin-wide*

Alternatives considered in the North Branch Park River watershed will attempt to work towards providing peak flow and volume reductions as specified in the RRBC LTFS. The total peak flow and volume reductions recommended for the Park River watershed are 35% and 20% reductions, respectively. Projects will not be considered with this as primary objective, rather will be recognized if alternatives can assist reducing the Park River's contribution to downstream flooding.

EXHIBIT A

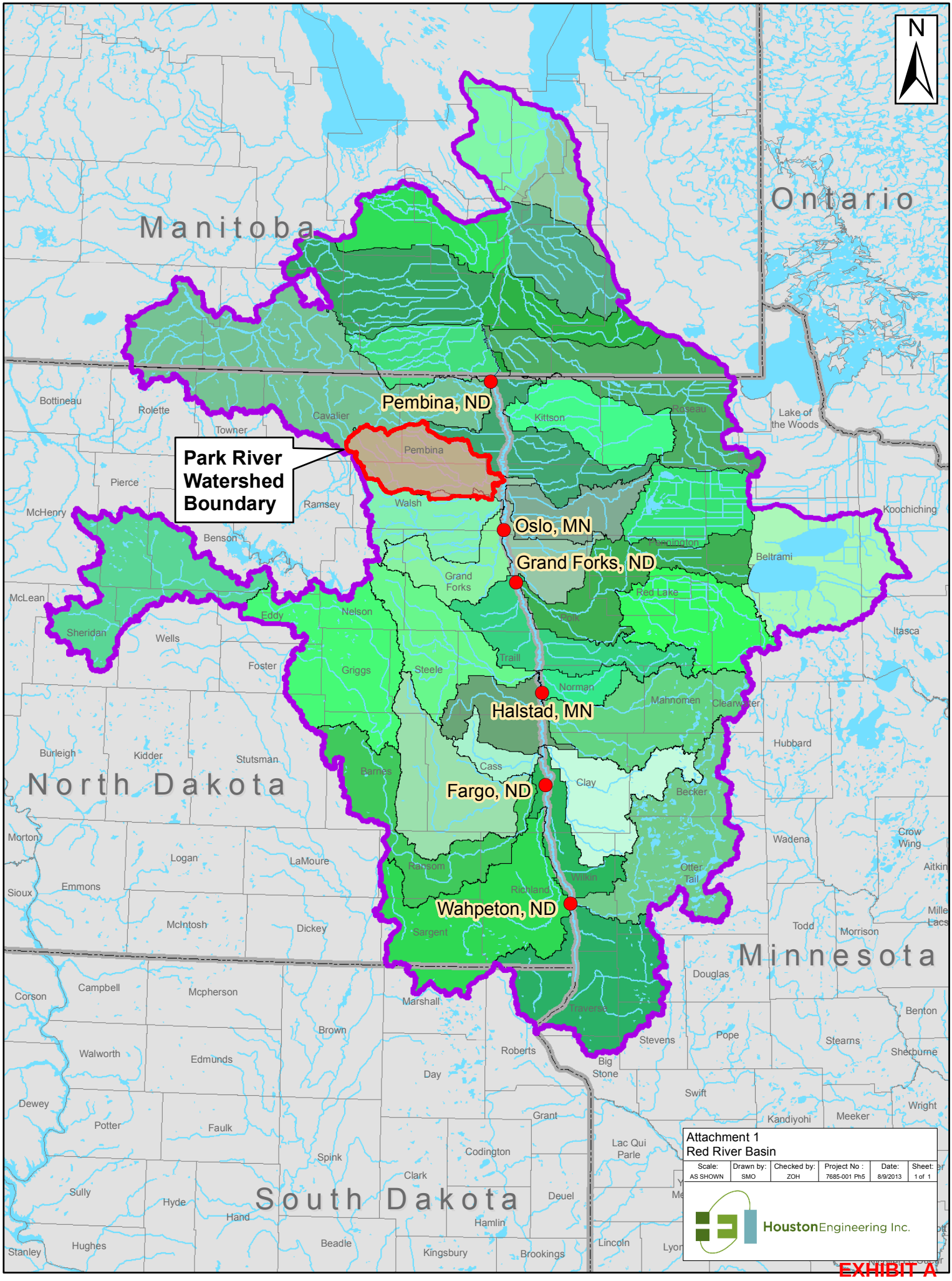
N
Manitoba
Ontario
Pembina, ND
Park River Watershed Boundary
Oslo, MN
Grand Forks, ND
Halstad, MN
Fargo, ND
Wahpeton, ND
North Dakota
South Dakota
Minnesota
Bottineau
Rolette
Towner
Cavalier
Pembina
Kittson
Roseau
Lake of the Woods
Pierce
McHenry
Ramsey
Walsh
Koochiching
Benson
Beltrami
McLean
Sheridan
Wells
Foster
Eddy
Nelson
Grand Forks
Griggs
Steele
Traill
Red Lake
Itasca
Norman
Mahnomen
Clearwater
Burleigh
Kidder
Stutsman
Barnes
Cass
Clay
Becker
Hubbard
Morton
Logan
LaMoure
Ransom
Wilkin
Otter Tail
Wadena
Crow Wing
Aitkin
Sioux
Emmons
Richland
McIntosh
Dickey
Sargent
Todd
Morrison
Corson
Campbell
Mcpherson
Marshall
Douglas
Traverse
Benton
Brown
Roberts
Stevens
Pope
Stearns
Sherburne
Walworth
Edmunds
Day
Big Stone
Swift
Dewey
Potter
Faulk
Grant
Kandiyohi
Meeker
Wright
Spink
Codington
Lac Qui Parle
Clark
Sully
Hyde
Hand
Deuel
Hamlin
Stanley
Hughes
Beadle
Kingsbury
Brookings
Lincoln
Attachment 1
Red River Basin
Scale: AS SHOWN
Drawn by: SMO
Checked by: ZOH
Project No : 7685-001 Ph5
Date: 8/9/2013
Sheet: 1 of 1
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EXHIBIT A

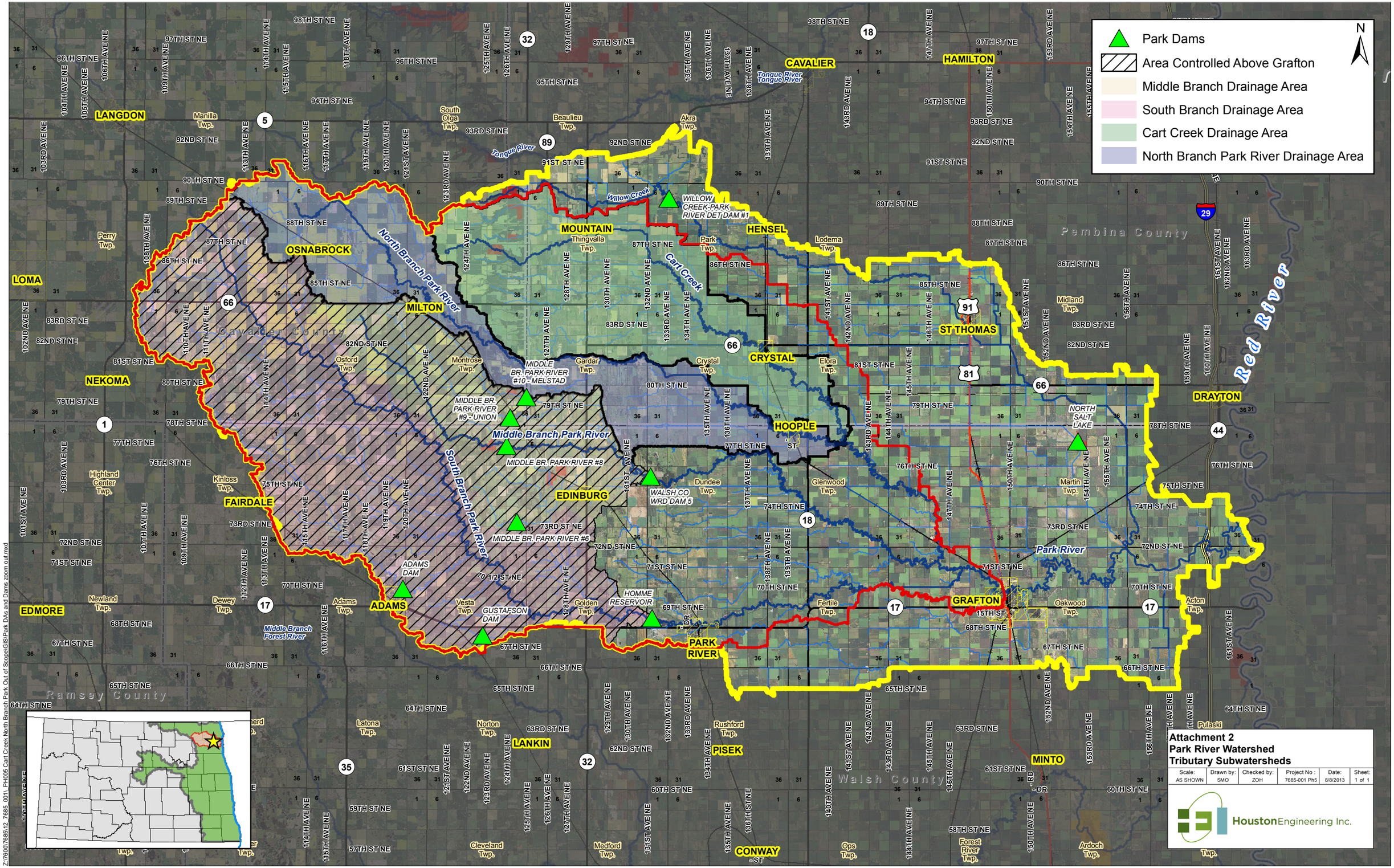
Park Dams
Area Controlled Above Grafton
Middle Branch Drainage Area
South Branch Drainage Area
Cart Creek Drainage Area
North Branch Park River Drainage Area
N
LANGDON
CAVALIER
HAMILTON
OSNABROCK
MOUNTAIN
HENSEL
MILTON
ST THOMAS
CRYSTAL
NEKOMA
HOOPLE
DRAYTON
FAIRDALE
EDINBURG
GRAFTON
EDMORE
ADAMS
PARK RIVER
LANKIN
PISEK
MINTO
CONWAY
LOMA
Pembina County
Ramsey County
Walsh County
Red River
North Branch Park River
Cart Creek
South Branch Park River
Middle Branch Park River
Middle Branch Forest River
Park River
Tongue River
Willow Creek
WILLOW CREEK-PARK RIVER DET DAM #1
MIDDLE BR. PARK RIVER #10 - MELSTAD
MIDDLE BR. PARK RIVER #9 - UNION
MIDDLE BR. PARK RIVER #8
MIDDLE BR. PARK RIVER #6
WALSH CO WRD DAM 5
ADAMS DAM
HOMME RESERVOIR
GUSTAFSON DAM
NORTH SALT LAKE
Attachment 2
Park River Watershed
Tributary Subwatersheds
Scale: AS SHOWN
Drawn by: SMO
Checked by: ZOH
Project No : 7685-001 Ph5
Date: 8/8/2013
Sheet: 1 of 1
HoustonEngineering Inc.
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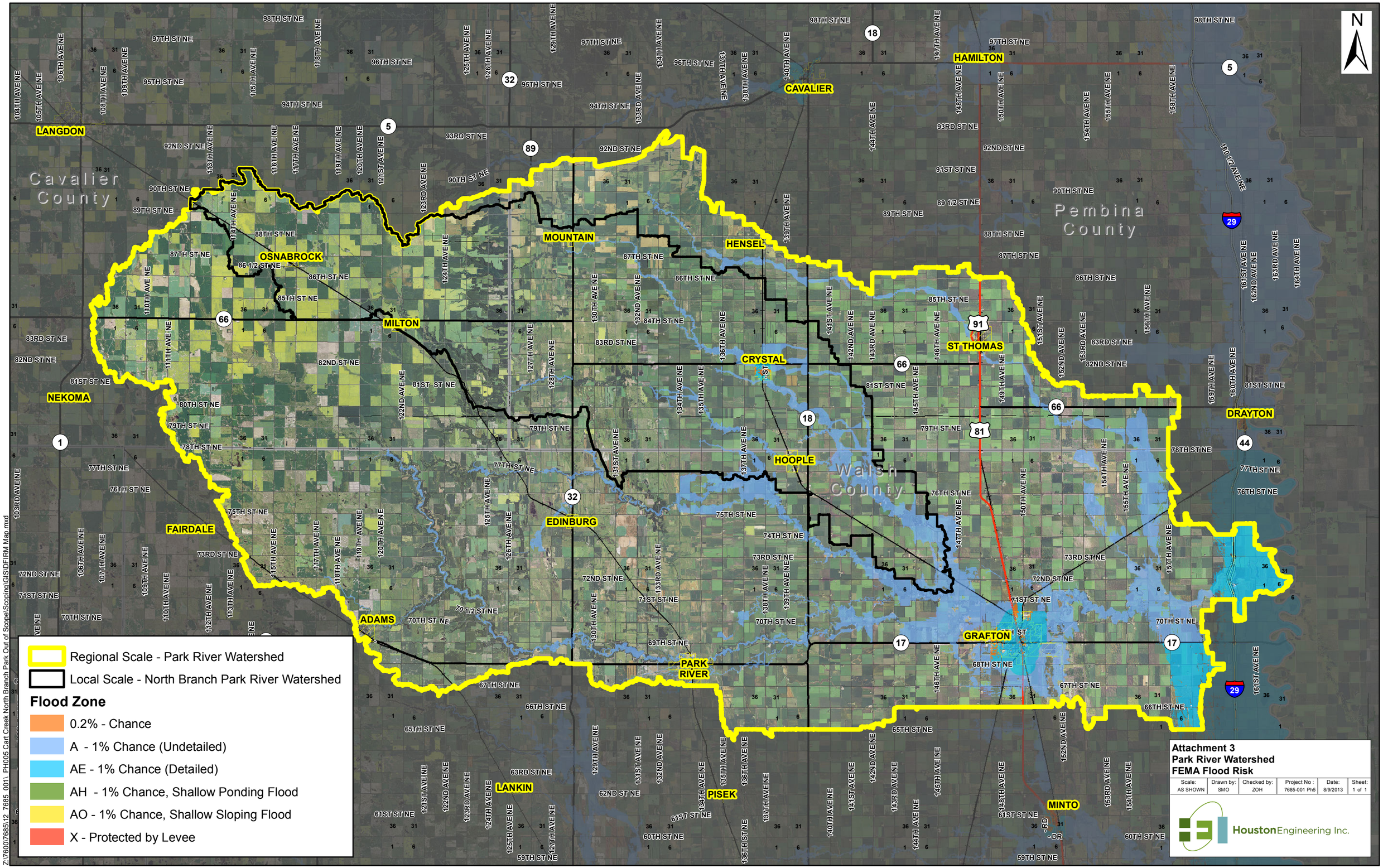
EXHIBIT A


N
LANGDON
Cavalier County
CAVALIER
HAMILTON
Pembina County
MOUNTAIN
HENSEL
OSNABROCK
MILTON
NEKOMA
CRYSTAL
ST THOMAS
DRAYTON
HOOPLE
Walsh County
EDINBURG
FAIRDALE
ADAMS
PARK RIVER
GRAFTON
LANKIN
PISEK
MINTO
Regional Scale - Park River Watershed
Local Scale - North Branch Park River Watershed
Flood Zone
0.2% - Chance
A - 1% Chance (Undetailed)
AE - 1% Chance (Detailed)
AH - 1% Chance, Shallow Ponding Flood
AO - 1% Chance, Shallow Sloping Flood
X - Protected by Levee
Attachment 3
Park River Watershed
FEMA Flood Risk
Scale: AS SHOWN
Drawn by: SMO
Checked by: ZOH
Project No : 7685-001 Ph5
Date: 8/9/2013
Sheet: 1 of 1
HoustonEngineering Inc.
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Attachment No. 4

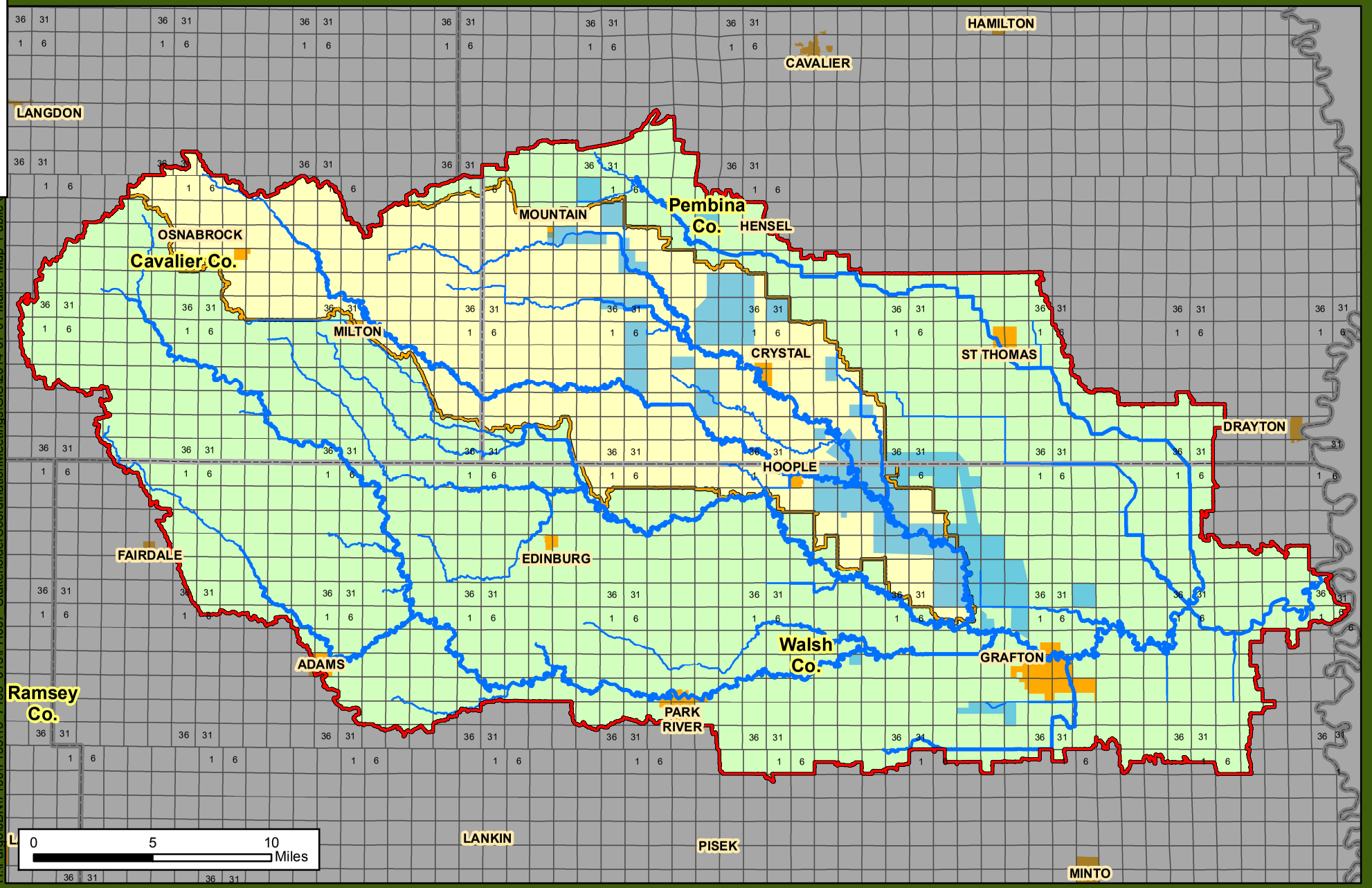

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EXHIBIT A

Park River Joint Water Resource District

North Branch Park River
Comprehensive Flood Damage Reduction
Public Comment Form

North Branch Watershed
Park River Watershed
Rivers and Streams
County Boundary
Township Boundary
City Limits
Received Problem Areas

N
W
E
S

Prepared By:

Houston Engineering Inc.

Attachment No. 4

Name	Address	Impacts to Your Property as a Result of Flooding	Overland Flooding Observations	How to Reduce Flood Risk	Additional Comments
James Aasand	1221 Western Ave Grafton, ND 58237	Crop loss due to North Branch of Park River backing up onto land or slow drainage into N Branch or N Branch overflowing its banks onto farmland causing overland flooding crop & land damage	Around the Nash area large amounts of land has been underwater	By slowing down or diverting waters from entering North Branch	
J. G. Beattie	8345 142nd Ave NE Crystal, ND 58222	Crop loss	There is so much water that comes into Elora Twp, over flow from willow creek, cart creek, the coulee south of Crystal along with local water. The water flows into the Twp so fast from the west & northwest & our Twp is flatter and doesn't have the elevation advantage that the Twp's west and northwest have.	Slow down the flow of water coming into Elora Twp before it gets here.	
Richard A Brabakken Sr	14180 77th St NE	All of the above. Last year I was flooded 3 times	It has been getting worse but there has been more heavy rains and more drainage	It would be nice if the water could be held upstream and slow the water down. It is pretty flat to hold much water where I live	We can handle are own water but we can not handle the water from upstream
Ray Brubakken	PO Box 307 Hoople, ND 58243	Loss of crops after a heavy rain. Unable to plant crops. Erosion cause by fast moving water.	With all the CRP removal, draining and diking, water moves faster than ever before. 2013 was the worst I have ever seen. 50% of our farm was not planted.	Hold water, clean river & Cart Creek.	I own the land where Cark Creek and the North Branch of the Park River meet. Cart Creek was always dry before July or August not that long ago. Now it never is.
Joyce Collis	14750 Hwy 17 Grafton	All of the culverts going east are collapsed or at the wrong angle all of the water backs up around and many property		redo the drainage	
Doug Davis	1344 Lawler Ave Grafton, ND	Crop loss, sandbagging of 2 properties, extensive erosion to ditches from overland Cart Creek flooding and water depositing in the field for a long period of time. Continuous running of sump pumps many acres of preventing planting 2013	too much water coming from Cart Creek into Park River and it comes too fast	some diversions of water from Cart Creek, dams or holding ponds to slow down water.	Water from Cart Creek not only damages adjacent property but the overland water, which could be enhanced by cutting of roads or ditches during flooding has devastated road ditches and filled my fields at my farm at Sec 5 Farmington 2 times within last 10 years. Costs to clean clay out of fields and fill holes in ditches have been quite high. Plus farm ability on the land for following years, especially in this wet cycle has been challenging.
John F. Desautel	405 Eastern Ave Grafton, ND 58237	We had to dike around the farm to try and keep water out. late spring planting, washed out roads, crops lost, and land damage.	The North Branch is filled with dead trees and has flooded our area for the last 20 or 30 years. It was gone over its banks and has been a big problem	I believe by slowing or holding water back & finding a over flow outlet to the east along with a clean out & doing some shayling(?) of the North Branch.	Prop Location (Sec 34 & part of 27 & 26). Areas impacted by flooding (Sec 21, 22, 28, 27, 33, 34).
John F. Desautel Farming Co. & D&H Land Co. LLC	7275 148th Ave NE Grafton, ND 58237 % Kevin Hoenke	Have lost crop many times from water coming down North Branch overflowing and going overland	To much water coming in North Branch river is not open to take all the water drainage has been changed upstream and water is coming too fast	I am hopeful that the two counties are talking. We have to have to use all options	I have been involved in Drain 70, 74 in Walsh County. The last 10 years the amount of water has changed we have lost hundreds of thousands in crop
Robert Desautel	15309 74th St NE Grafton, ND	Can't get in to see it P.P. 3 times last 5 years, when seeded heavy rain comes from NW. Drowns my crops	It jumps out of the North Branch straight north of Nash 1.5 miles. Runs across land to the southeast.	Holding water back to the Northwest	I think storing water close to the escarpment would be very feasible.
Beth & Rick Engelmann	Box 136 Hoople, ND 58243	Crop loss, land erosion, ditching		Getting Mountain water to Red River without going through Grafton. Clean Cart Creek, channel blocked with trees	Land Affected: SE 1/4 S9 159-54, NE 1/4 S16 159-54, SE 1/4 S22 159-54, SW 1/4 S23 159-54, SE 1/4 SW 1/4 S27 159-54, SW 1/4 S28 159-54, S35 159-54
Loren Estad	13545 84th St NE Crystal, ND	Crop damages and erosion to farm land	Mountain east to willow coulee on North side of 3 is becoming a major artery for excess runoff	Retention dams be placed west of Hwy 32	
Lindsey Fingarson	13021 78th St NE Edinburg, ND 58227	Crop loss - seeding later in the spring because of excess water from Cart Creek	Cart Creek can not handle the large amount of water at spring runoff and big summer rains.	Putting in retention dams at the water heads	19-160-55
Hans & Tara Halvorson	7467 Cty Rd 6 Nash, ND	Flooded yard most years. Water on the main floor in home for 1st time in 2013. Flooded woods most years. Flooded buildings (barn, outbuildings) most years	Getting worse every year. Incredible amount of "personal protection" that collectively affects others	Create "holding areas" further upstream to manage water levels	
Russell Hannessor	13120 Co Rd 3 Mountain, ND	Water exceeds creek and does major soil erosion next to drain	wetter weather causing more water and water coming off hill in Cavalier Co. faster than before	Slow down water in big coulee to the west in western Pembina and Cav. county	Your surface ponds will work but there is to much slope for five miles east of Mountain so detention dams are only thing that will help Mountain Area

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Name	Address	Impacts to Your Property as a Result of Flooding	Overland Flooding Observations	How to Reduce Flood Risk	Additional Comments
Chad Hornbaker	14445 76th St NE	Lived at residence 11 years. No damage from flooding. New drainage ditch on east side of property could have adverse effects in spring!	Water flows overland one mile north of my property and comes south 1.5 miles east of my property. Neighbors are affected by overland flooding.	Control individuals diking, ditching, and putting culverts in to protect their property but as a result force water on others.	Neighbors are fighting over forcing water on each others crops/fields/land and continue to dike/ditch with no obvious regulation or monitoring. Who is responsible for figuring out how ditch/dike will affect the watershed & flooding
Kevin Johnson	3348 McIntosh Dr Billings, MT 59101	Mostly just brush & some garbage	I really haven't seen any - but I don't live there either	Quit draining natural pot holes	
John H. Johnson	12637 81st St NE Edinburg, ND 58227	The North Branch of the Park River is eroding the banks at a faster pace than years ago. I live close to the river	I live on the Pembina Hills Escarpment and water drains at a high rate here so overland flooding is brief	More control of the water upstream	
Lonnette Kelley	8135 130th Ave NE Mountain, ND 58262	I have lived here since 1995 - during these past years never any flooding except for the time we had 9.5 inches at once-only small amounts of water in basement. Since 2005 yearly water in basement and increasing from 1 sump pump to 4 additional when the water starts running in. Has caused many dollars worth of damages and huge amounts of time fighting water	Last number of years water is coming from Walhalla area. Everything comes to our gravel corner & Hwy3-like a basin it fills the entire fields surrounding my home. Tries to run down the small creeks and ditches east but just no place to go. Something has changed in the last years to divert the water (all) to this basin area	Change whatever changed and let the water go back to its original path. Stop diverting the heavy flows of water here.	This change in the water flow is causing a hardship with my home-creating many problems with this 100 year old home, the drain fields, basement, appliances, as this is my business also creates many issues for my guests, with plumbing issues and cancelled appointments. Very costly and hard to continue fighting the waters. Was never this way in the past years.
Andrew Kirking, Emergency Manager	Not in Project Area		Rapid water movement through legal drains & ditches causing deep rutting & washouts	Slow water down. Whether through retention or increasing wetlands, hold water longer upstream	I'm not a farmer & have no land at stake, but if it is possible to have many smaller storage areas so that many give a little. Multi-section detention sites are better than what we have now, but could many small areas be implemented?
Michael Kiser (C/O) Dorothy Doktor Family Trust, Kiser Family Trust, Apalona Kiser	501 5th St W Ada, MN 56510	The entire family farm consists of 400 acres and includes a building site which we use and maintain. Basically the entire farm is impacted by flooding. The farmstead has not gotten flooded recently, but that is because we have diked it at our own expense. In 2013, the farmstead was almost flooded in spite of our diking effort's. In 2013, the farm flooded in the spring plus 3 times during the summer. The access to the farm was blocked by flooded roads. Soil and clay was eroded from neighboring farms and deposited on our farm, causing additional damage and expense. Very little of the farm was planted. Although previous years may not have been as bad as 2013, getting the crop planted and then having it survive summer floods has been increasingly very challenging and risky for the past 20 years or so.	2013 may have been the worst year yet.	Our farm is at the bottom of the Cart Creek watershed, so about 99% of the water in the entire watershed goes through it. Better enforcement of drainage restrictions on upper areas of watershed would have helped in the past and should be done in the future. At this point cleaning and diking the channels may help. Water retention may also help.	It is possible some farmland could be given up and used for water retention, but owners would need adequate compensation. It is noted compensation should be based on what the farm would rent and sell for if it was not negatively impacted by the drainage projects on farms upstream.
Bruce & Vicki Lenz	640 6th St Crystal, ND 58202	Personally none; however, flooding damaged parks, several homes in which one had to be destroyed, friends house had damage	Crystal has Cark Creek running through it. There was a lake here which is grown in swamp now the creek flows through it. If we got grants to restore the lake & fix the damn it would cut back on the town flooding	Explained above. Half the town was flooded	If the lake was restored, fish could be introduced, park could set up camp sights and it would be more $ in county with tourism
Bill Mitchell	1286 8th Ave NE Thompson, ND 58278				Section 22 has a small coulee on one end only flooding is some overland on this property
Leslie A. Moe POA for Helen Moe	1721 Charleswood Est Dr West Fargo, ND 58078	NA	Culverts not properly cared for or larger culverts need to be installed - ditches not cleaned out	Clean trees out of ditches, larger culverts to allow water to flow and bridge repair	
Ronald D. Moe	6689 Hwy 81 Grafton, ND 58237	Perpetual field crossing washouts, delayed spring planting, and some annual crop losses.	It is getting worse every year as farmers improve upon their field drains.	See my eleven page letter enclosed.	I think you should seriously look at doing a high-water diversion of Cart Creek and the north branch of the PR from the confluence of the two directly to the Red River along mid-section lines. Considering the property lines and farmstead locations shown on plat book maps it loos very doable to me.

EXHIBIT A

Attachment No. 4

Name	Address	Impacts to Your Property as a Result of Flooding	Overland Flooding Observations	How to Reduce Flood Risk	Additional Comments
Mountain Cemetary Assn	Box 146 Mountain, ND 50262	No impact			
F. Paul O'Keefe	8233 137th Ave NE Crystal, ND 58222	During high water we are isolated by water over the roads and as a result the gravel is washed off. No damage to buildings	Erodes the topsoil. Delays planting. Piles up Debris. Bring in weeds	Holding areas to the N.W. on Cart Creek. Diversion around Crystal	High water is occurring more often. This has an impact on our property value, making sale of this property difficult. I am not qualified to comment on water storage
F Kenneth Olafson	208 E Oakland Ave Milton, ND 58260	Large comment letter, didn't return form.			
Roger Olafson	12945 84th St NE Edinburg, ND 58227	Moderate crop loss. Moderate to heavy property damage due to erosion and washouts caused by stream breakouts.	It seems some changes have been made upstream as water comes through in larger amounts in places there didn't use to cause problems	Combination of retention dams, holding areas to temporarily store water, channel improvements (cleaning & widening)	This is the third such meeting I have attended on Park River/Cart Creek flooding problems (Mountain-2006, Hoople-2009, Mountain-2014) and this is the first one where I felt there were some meaningful dialogue and well through out possible solutions to the flooding issues.
Robert Olgeirson	301 W Ave C Bismarck, ND 58501	We were forced to dig a $3000+ ditch across a good field to direct overland flooding. It came across several fields instead of the creek channel	Getting worse than it ever was	Keep some of the water in Cavalier county- which is the source	Main creek on our property flows south of Hwy 66 and then back. Creek shown on map is Not the main one but a much smaller drain and insignificant in comparison
Jerry & Nadine Olson	14187 State Hwy 66 - Box 74 Hoople, ND 58243	Our yard is very old and people chose the high ground	Overland flooding is created by us persons by using roads for dams and everyone wanting to run water away from them. Every north-south road should have a large culvert every mile to let water run east to the Red River	For many years nearly all farms had (potholes) or low ground that held water for days weeks or months before being planted. With new leveling and dirt mover these areas have been changed or moved.	Country Road 12 acts as huge dam and directs water as do many other township build (roads or dams) to keep water moving to someone else's land. I hope if you live in Osnabrock and want to go to Pembina there is a short way than through Grafton
Doug Ramsey	8169 136th Ave NE Crystal, ND 58222	It floods our land and puts water in our basement	It piles up along township roads and washes them out. It floods Crystal	Putting a diversion ditch around the west side of Crystal	For the North Branch of the Park River and Cart Creek dams should be built on the Pembina Escarpment.
Darryl Sander	810 Westwood Ave Larimore, ND 58251	On sec 31-157-53 the coulee that runs threw this quarter used to be spring runoff only, now with all the upstream drainage it has become a year round river. I understand a lot of drainage has been done without the proper permits. Why?			Some thing needs to be done about all the upstream drainage into a coulee when it should go to the river
Penny Sigfusson (Ventor)	8115 128th Ave NE	Water running in the basement like a waterfall	There is nowhere for the water to go except through my yard		All I need is a culvert put in on the North side of my yard, I think that would fix the problem
Chris Thompson	15320 71st PL Ne Grafton, ND 58237	Crop loss, property damage	I believe there is overland flooding caused by illegal dikes and other practices that don't allow the water to go into it's natural channels	Improving the existing drains and waterways	
Ron & Delores Willis	PO Box 370 Ilwaco, WA 98624	Unknown, Live in Washington State	None	No Knowledge	(Picture on comment form)

EXHIBIT A