

MIDVALE CITY, UTAH

RESOLUTION NO. 2017-R-35

**A RESOLUTION OF THE CITY COUNCIL OF MIDVALE CITY, UTAH,
APPROVING THE INTERLOCAL COOPERATION AGREEMENT
BETWEEN MURRAY CITY AND MIDVALE CITY FOR STORMWATER
DETENTION AT THE BINGHAM JUNCTION FACILITY**

WHEREAS, Murray City and Midvale City are public agencies as defined under the Interlocal Cooperation Act; and

WHEREAS, Murray and Midvale are contiguous to each other and share a common boundary; and

WHEREAS, in 2006 Midvale approved the Bingham Junction commercial and residential projects that included an open space area consisting of a wetlands mitigation area and a park and a storm drain detention pond known as the Bingham Junction Detention Facility; and

WHEREAS, Midvale owns, maintains, and operates the Bingham Junction Detention Facility; and

WHEREAS, a drainage report with storm drain calculations, dated June 26, 2006 was prepared by Ensign Engineering and Land Surveying for the Bingham Junction Development that identified 11 drainage basins of which basins 7 and 10 are the only Areas located in Murray with all other Areas located in Midvale; and

WHEREAS, Midvale owns and maintains a 48" diameter storm drain pipe located in Midvale near the boundary between Murray and Midvale that collects storm water from drainage basins identified in the Report including areas 7 and 10; and

WHEREAS, Area 10 is a proposed residential subdivision that will require on-site detention and will discharge into the Midvale system; and

WHEREAS, Murray and Midvale acknowledge that Midvale should be responsible for 68% and Murray for 32% if the maintenance costs of the 48" outfall pipe and Bingham Junction Detention Facility

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MIDVALE, UTAH:

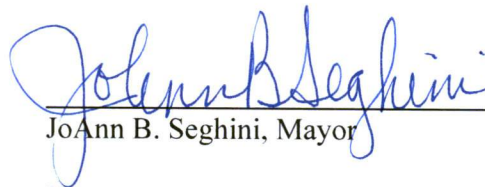
SECTION 1.

The Midvale City Council has determined that it would be in the best interests of the City as well as the general public to enter into an interlocal agreement with Murray City for the purpose of providing storm water detention at the Bingham Junction Detention Facility and authorizes the Mayor to sign said agreement on behalf of the City

SECTION 2. Effective Date.

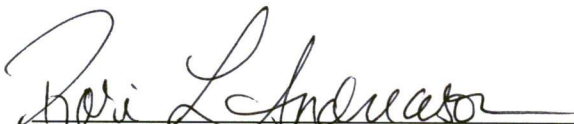
This Resolution shall become effective upon passage.

APPROVED BY THE CITY COUNCIL OF THE MIDVALE CITY, UTAH, ON THIS
19 DAY OF September, 2017.


JoAnn B. Seghini, Mayor

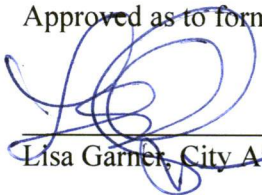
Vote by the City Council:	Aye	Nay
Stephen Brown	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paul Glover	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paul Hunt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Quinn Sperry	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wayne Sharp	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Attest:


Rori L. Andreason, MMC
City Recorder



Approved as to form:


Lisa Garner, City Attorney

**INTERLOCAL COOPERATION AGREEMENT
BETWEEN
MURRAY CITY
AND
MIDVALE CITY**

**FOR STORMWATER DETENTION AT THE
BINGHAM JUNCTION DETENTION FACILITY**

This Interlocal Cooperation Agreement (Agreement) is made and entered into this 10 day of October, 2017, by and between MURRAY CITY CORPORATION (Murray) and MIDVALE CITY ("Midvale"). Murray and Midvale are sometimes referred to collectively as the "Parties" and either may be referred to individually as a "Party", all as governed by the context in which such words are used.

RECITALS

A. Murray and Midvale are public agencies as defined under the Interlocal Cooperation Act, Title 11, Chapter 3 of the Utah Code (the "Interlocal Act") which Interlocal Act provides that any two or more public agencies may enter into an agreement with one another for joint or cooperative action.

B. Murray and Midvale are contiguous to each other and share a common boundary as shown on the map attached as Exhibit "A".

C. In 2006, Midvale approved the Bingham Junction commercial and residential project. This project included an open space area consisting of a wetlands mitigation area and a park and storm drain detention pond area ("Bingham Junction Detention Facility"). Midvale owns and maintains the Bingham Junction Detention Facility.

D. A drainage report with storm drain calculations, dated June 26, 2006 was prepared by Ensign Engineering and Land Surveying, Incorporated ("Report"; see copy of the Report attached as Exhibit "B"). The Report identified 11 drainage basins referred to as Area 1 through Area 11 (referred to herein as "Areas" collectively). Area 7 and Area 10 identified in the Report are the only Areas located in Murray. All of the other Areas are located in Midvale.

E. Midvale owns and maintains a 48" in diameter main storm drain pipe ("Midvale Main") located inside Midvale near the border of Murray and Midvale. The Midvale Main collects storm water from the developed drainage basins identified in the Report, including Area 7, and will collect storm water from the Area 10 drainage basin that is not yet developed. The Report attributes to Murray 32% of the proportion of

storm drain water that will flow through the Midvale Main into the Bingham Junction Detention Facility from the combined Areas 7 and 10 after Area 10 is developed.

F. Area 10 is a proposed residential subdivision that will require an on-site detention pond that will discharge into the Midvale Main at the reduced rate identified in the Report by means of an outfall pipe not greater than 24" in diameter. The Area 10 on-site detention pond will be developed and constructed by the developer, Garbett Homes, in accordance with Murray storm water improvement construction standards. Murray plans to inspect and accept the dedication of the on-site detention pond and outfall pipe and to maintain them in perpetuity.

G. Murray and Midvale acknowledge that Midvale should be responsible for 68% and Murray for 32% of the maintenance costs of the 48" outfall pipe and Bingham Junction Detention Facility. Murray's contribution will be made by cash contributions to Midvale.

H. Murray and Midvale want to enter into this Agreement to specify the terms and conditions to work cooperatively in mitigating the storm water from the Bingham Junction Project (Areas 1 – 5 in the Report), the adjacent Midvale areas (Areas 6, 8, 9, and 11 in the Report) and the adjacent Murray Areas 7 and 10.

NOW, THEREFORE, in reliance on the stated recitals, which are incorporated herein by reference and in consideration of the mutual covenants set forth herein, Murray and Midvale agree as follows:

1. Definitions. Terms defined in the foregoing recitals shall, to the extent used but not otherwise defined herein, be used as so defined.

2. Purpose. This Agreement is entered into by Murray and Midvale to accomplish the purposes set forth in the recitals.

3. Accept Findings and Conclusions of Reports.

Murray and Midvale accept the findings and conclusions of the drainage report, including the storm drain calculations, dated June 26, 2006, prepared by Ensign Engineering and Land Surveying, Incorporated ("Report") a copy of which is attached as Exhibit "B". In particular, Murray and Midvale agree that the proportion of storm drain water between Murray and Midvale that will flow into the Bingham Junction Detention Facility after drainage basin Area 10 is developed is as follows:

Murray 32%

Midvale 68%

6. Maintenance of Improvements. After acceptance by Murray of the dedication of the Area 10 detention pond and outfall pipe, Murray shall thereafter maintain the Area 10 detention pond and outfall pipe and shall reimburse through payment to Midvale for thirty-two percent (32%) of the maintenance costs of the Midvale Main and Bingham Junction Detention Facility within thirty (30) days after Murray receives an invoice from Midvale specifying the maintenance costs.

7. Midvale Stormwater Ordinance. In order to ensure compliance with any permitting requirements from state and federal authorities, Midvale and Murray agree that in the event that any property in Area 7 or Area 10 is developed for any use other than a single-family home or a duplex, that property will be required to enter into a Long-term Stormwater Management Agreement with Midvale. Murray agrees to assist Midvale in taking any corrective action for any property affected by this provision.

8. Liability and Indemnification. Murray and Midvale are governmental entities under the Governmental Immunity Act of Utah, Title 63G, Chapter 7 of the Utah Code. Consistent with the Governmental Immunity Act of Utah, Murray and Midvale shall be responsible and liable for their own wrongful or negligent acts which they commit. Murray and Midvale do not waive any defenses otherwise available to them under the Governmental Immunity Act of Utah.

9. Term of Agreement.

a. This Agreement shall take effect immediately upon completion of all of the following:

i. The approval of the Agreement by the Murray City Council and the Midvale City Council, including the adoption of any necessary resolutions or ordinances authorizing the execution of this Agreement by the appropriate person or persons for Murray and Midvale;

ii. The execution of this Agreement by a duly-authorized official of Murray and Midvale.

b. This Agreement shall be effective until the purposes of the Agreement are completed, not to exceed the limitation provided in Section 11-13-204 of the Utah Code. This Agreement may be terminated for cause on providing not less than ninety (90) days' written notice to the other party advising the other party of the cause for termination and providing the other a reasonable opportunity and time to cure the cause for termination.

10. No Separate Entity Created. No separate legal entity is created by the terms of this Agreement. To the extent that this Agreement requires administration other than as set forth herein, it shall be administered by the Mayor of Murray and the City Manager of Midvale.

11. Counterparts. This Agreement may be executed in counterparts by Murray and Midvale.

12. Notices. Any notice required or permitted to be given hereunder shall be deemed sufficient if given by a communication in writing, and shall be deemed to have been received (a) upon personal delivery or actual receipt thereof, or (b) within three days after such notice is deposited in the United States mail, postage pre-paid, and certified and addressed as follows:

Murray: Doug Hill
Public Services Director
4646 South 500 West
Murray, Utah 84123

Midvale: Kane Loader
City Manager
7505 S. Holden Street
Midvale, Utah 84047

13. Amendments. This Agreement may be amended, changed, modified or altered only by an instrument in writing which shall be (a) approved by the Murray City Council and the Midvale City Council, including the adoption of any necessary resolutions or ordinances authorizing the execution of any amendment, change, modification or alteration of this Agreement, (b) executed by a duly-authorized official of each Party.

14. Governing Law. This Agreement shall be governed by the laws of the State of Utah both as to interpretation and performance.

15. Resolution of Claims and Disputes. In any action brought to enforce the terms of this Agreement Murray and Midvale agree that the appropriate venue shall be the Third Judicial District Court in and for Salt Lake County, Utah.

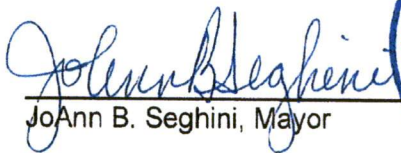
16. Entire Agreement. This Agreement contains the entire agreement between the Parties with respect to the subject matter hereof, and no statements, promises, or inducements made by either Murray or Midvale or their agents that are not contained in this written Agreement shall be binding or valid.

17. Severability. If any provision hereof shall be held or deemed to be or shall, in fact, be inoperative or unenforceable as applied in any particular case in any jurisdiction or in all jurisdictions, or in all cases because it conflicts with any other provision or provisions hereof or any constitution or statute or rule or public policy, or for any other reason, such circumstances shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case or circumstance, or of rendering any other provision or provisions herein contained invalid, inoperative or unenforceable to any extent whatever.

The invalidity of any one or more phrases, sentences, clauses, or paragraphs herein contained, shall not affect the remaining portions hereof, or any part thereof.

IN WITNESS WHEREOF, Murray and Midvale have subscribed their names and seals the day and year first above written.

MIDVALE CITY

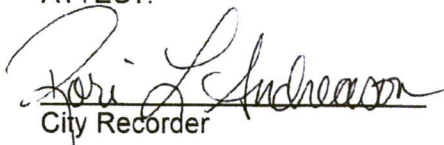

JoAnn B. Seghini, Mayor



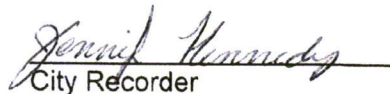
MURRAY CITY CORPORATION



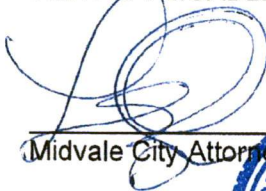
ATTEST:


Rori L. Anderson
City Recorder

ATTEST:

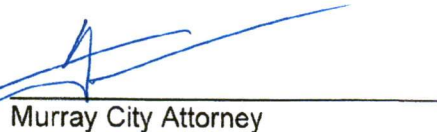

Jennifer Kennedy
City Recorder

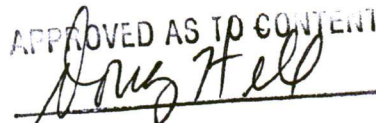
APPROVED AND REVIEWED AS TO
PROPER FORM AND COMPLIANCE
WITH APPLICABLE LAW


Midvale City Attorney



APPROVED AND REVIEWED AS TO
PROPER FORM AND COMPLIANCE
WITH APPLICABLE LAW


Murray City Attorney

APPROVED AS TO CONTENT


Approved as to the availability of funds
Murray City Finance Division

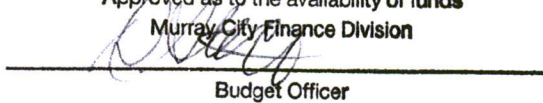
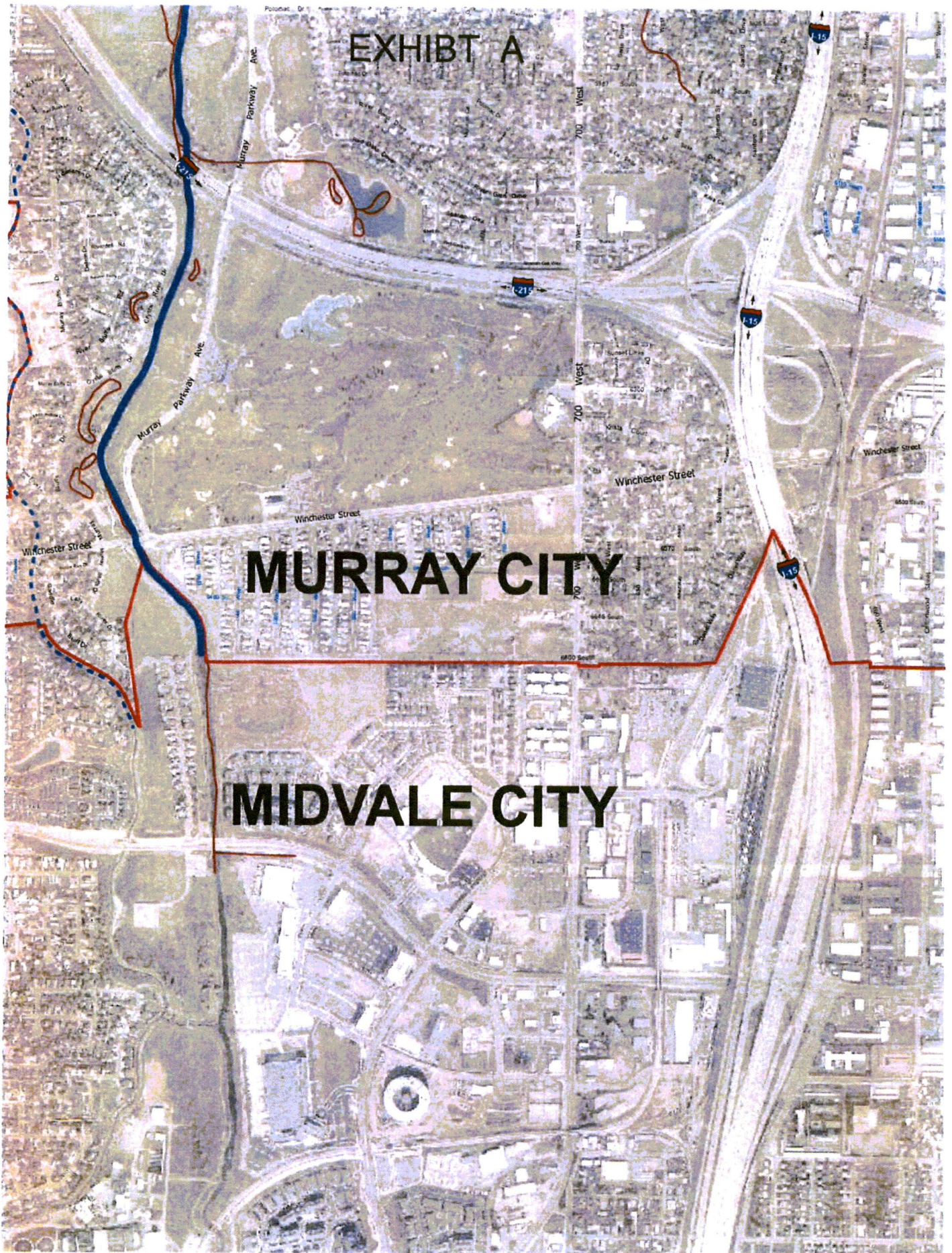

Budget Officer

EXHIBIT A



MURRAY CITY

MIDVALE CITY

EXHIBIT B

STORM DRAIN CALCULATIONS

**Bingham Junction Phase 1
7200 South 700 West
Midvale, UT**

Date: June 26, 2006

Prepared For:
John D. Mercer & Company
200 Brown Road, Suite 102
Fremont, CA 94539

Ensign Job Number: 3404

Prepared By: B. Morris



90 East Fort Union Blvd., Suite 100 Midvale, Utah 84047 (801) 255-0529 Fax (801) 255-4449

1.0 INTRODUCTION

The purpose of this report is to describe the storm drainage design for the Bingham Junction Commercial and residential Project. The project is located in Midvale City, Utah and is bounded on the north by the Murray City boundary, on the west by the Jordan River, on the East by 700 West Street, and on the south by the Jordan River Boulevard (7200-7000 South). The site is 129.70 acres. The proposed development consists of mixed use development with areas of Retail Space, Professional Office, Medium Density Housing, High Density Housing, and an open space area consisting of a wetlands mitigation area and a park/storm drain detention pond area.

The development of the site has proposed many significant engineering challenges. Soils on the site have wind-blown contamination from the old Sharon Steel Factory. There are also a few areas of jurisdictional wetlands that have been identified on the site. The site is also a natural low graded area with a large amount of adjacent tributary area that drains to it. This report does not deal with all of these items, although each one is currently being addressed with the corresponding agency. This report outlines the engineering design concepts used to mitigate the storm water from the site and adjacent areas, and locate and size the required detention ponds and storm drain conveyance systems.

2.0 DESIGN CRITERIA AND ASSUMPTIONS

A large amount of investigational work was necessary to determine the existing adjacent areas that currently drain to the site. This work is based on conversations with corresponding agencies, site visits, and survey information that were provided. Working with the developer a proposed layout was developed. Based on this information drainage basin areas were established. The coefficient of runoff was assumed or calculated based on the existing or proposed developed area. The time of concentration was calculated for each site and rounded to the nearest 15 minutes. Drainage basins were placed in two categories. The first category is undetained flows, and the second category was sites with existing detention flow restrictions or undeveloped sites that need to be designed with detention and flow restrictions. The flow restriction on those sites was anticipated at 0.2 cfs/acre.

Rainfall intensities were taken from "Rainfall Intensity Duration Analysis," prepared for Salt Lake County by "TRC North American Weather Consultants, and Meteorological Solutions Inc." Pipes are sized based on the 10-year frequency storm, using "Manning's" Equation. Detention facilities are sized based on the Rational Formula using a 100-year frequency 24 hour duration storm.

3.0 SITE DRAINAGE

The drainage basins that were established were numbered as Area 1 through Area 11. Areas 1 through Area 7 are undetained drainage basins that flow directly to the detention basin. Areas 8 through Area 11 have existing detention facilities, or are undeveloped areas that will have to

provide detention once developed. A map of these drainage basins is included, and each one of these drainage basins will be described.

Areas 1 and 2 are the proposed site commercial areas. Area 3 is the proposed professional office area. Area 4 is the High Density Residential Housing area, Area 5 is the Medium Density Housing area. These five areas include all of the site development area for Bingham Junction. The remainder of the basin areas are not within the proposed development area, however they currently drain onto our site. Area 6 is the south section of the Salt Lake County Facilities. From site observation there appears to be no detention for this area. Area 7 is an existing subdivision in Murray which also appears to have no detention facilities. Detention for Areas 6 and 7 have been added to the detention requirements for the Bingham Junction site detention.

Areas 8 and 9 are existing industrial/commercial buildings along 700 West. These areas have been assumed to have detention and are restricted to 0.2 cfs/acre. Area 10 is basically undeveloped area on the north side of the project in Murray City. There appears to be no existing detention facilities for this area. Once Area 10 is developed it should be restricted to an outlet of 0.2 cfs/acre. Area 11 is also existing Salt Lake County property. However, this area appears to have detention facilities and is assumed to be restricted to 0.2 cfs/acre.

Pipe Sizing

Once the drainage basins were identified, time of concentration was calculated, and a runoff coefficient was determined, these values were then modeled into a computer program for hydrology called Storm CAD to help determine pipe sizes. The results of that model have been included in this report. The corresponding pipe sizes and lengths can also be seen on sheet C 2.0 and the plan and profile sheets of the design drawings.

Detention Facilities

The proposed layout of the Bingham Junction site provides a large area to facilitate detention requirements in the open space area. The proposed detention pond is designed to provide detention to those areas tributary to the site without detention facilities. The restrictions within the detention pond have been sized so that those areas that currently have detention facilities are allowed to pass through the site detention facilities. All of the combined flows, detained and undetained, flow from the detention pond, through the wetlands and into the Jordan River. The drainage basin areas were input into an excel spreadsheet and storage requirements were obtained. The restricted release rate for all of these areas is 0.2 cfs/acre. Those results have been provided in this report.

The total volume required for this detention pond is 356,361 cubic feet or 8.2 acre feet. The allowable discharge for the total drainage area of 262.81 acres at 0.2 cfs/acre is 52.56 cfs. The high water elevation in the detention pond is at the 4278 contour. The maximum depth of the pond is 4.8 feet deep. The discharge outlet pipe would be two 24-inch diameter reinforced concrete pipes.

**DRAINAGE CALCULATION
FOR
BINGHAM JUNCTION**

LOCATION: 700 West 7200 South PROJECT NO. 3404
 BY: B. Morris
 DATE: 6/27/2005

AREA DETENTION POND CALCULATIONS			AREA COEFFICIENTS
	Area 1	8.75 acres	0.80
	Area 2	43.08 acres	0.80
	Area 3	3.14 acres	0.80
	Area 4	12.51 acres	0.70
	Area 5	49.68 acres	0.30
	Area 6	31.12 acres	0.60
	Area 7	49.20 acres	0.35
TOTAL AREA:			197.48 acres
			TOTAL C: 0.52
			TOTAL C = (A1 x C1 + A2 x C2 + A3 x C3 + A4 x C4 + A5 x C5 + A6 x C6 + A7 x C7) / A

AREAS WITH DETENTION OR REQUIRED DETENTION DESIGN		
	Area 8	21.05 acres
	Area 9	10.11 acres
	Area 10	34.17 acres
	Area 11	36.01 acres
OVERALL TOTAL AREA:		262.81 acres

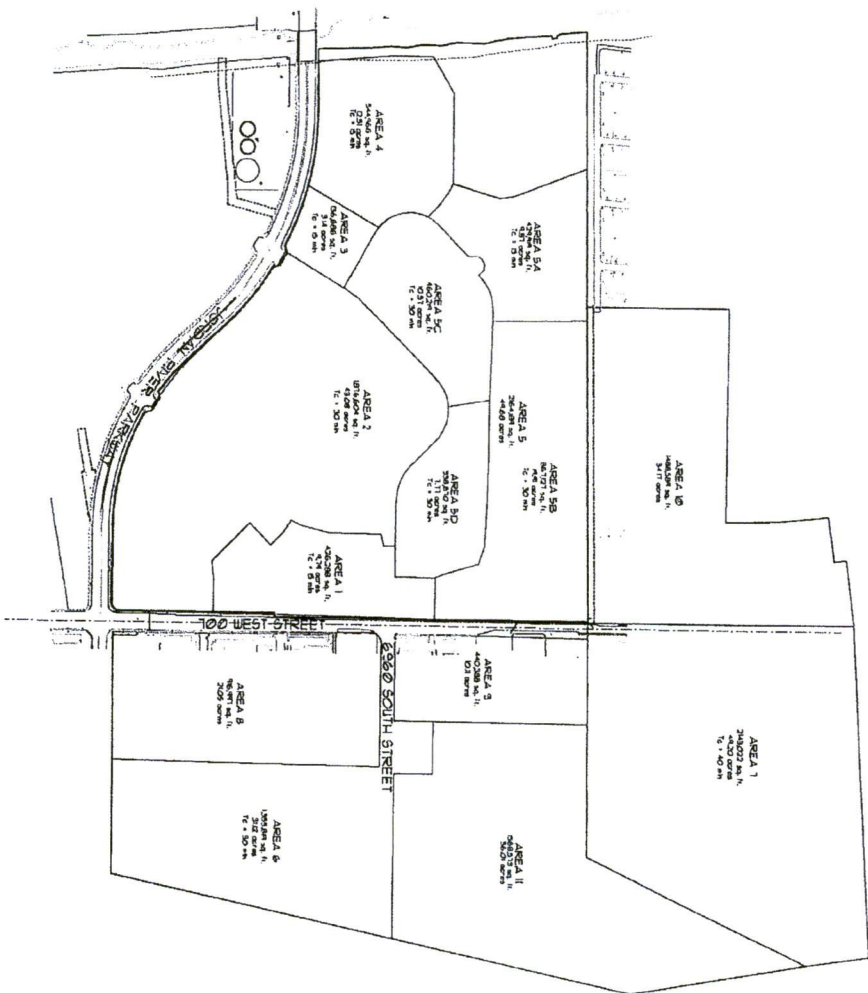
ALLOWABLE RUNOFF	
0.2 cfs/ac =	52.56 cfs

MINUTES	CA	I	T(sec)	CUMULATIVE RUNOFF	ALLOWABLE RUNOFF	STORAGE (ft^3)
15	103.53	3.52	900	327,980	47,306	280,674
30	103.53	2.42	1,800	450,972	94,612	356,361
60	103.53	1.41	3,600	525,513	189,223	336,290
360	103.53	0.33	21,600	737,955	1,135,339	-397,384
720	103.53	0.20	43,200	894,491	2,270,678	-1,376,188
1440	103.53	0.12	86,400	1,073,389	4,541,357	-3,467,968

NOTE: 100 Year Storm

STORAGE REQUIRED :	356,361 ft^3
STORAGE PROVIDED :	366,700 ft^3

OUTLET CONTROL			
Q (cfs)=	52.6	HWM	78.0
C=	0.6	FL @ GATE	73.2
g (ft/s^2)=	32.2	h (ft)=	4.8
AREA (in^2) = 717.50 = Q / (C x (2 x g x h)^0.5)			
DIAM. (in) = 30.22			
AREA OF (2) 24" PIPES = 904.8			
AREA OF (2) 21" PIPES = 692.7			
PROVIDE: (2) 24" DIAMETER PIPES			



ENSIGN

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**RIVER WALK
AT
BINGHAM JUNCTION**

MIDVALE, UTAH

JOHN D. WETTER & COMPANY

1 of 1