City of Norman
ADA Self-Evaluation and Transition Plan
Sidewalk Cost Projection Summary - Park Pedestrian Bridges
5/1/2018

GPS ID	Project Name	Cost Projection
200	Andrews Park Bridge 1	Compliant
200	Andrews Park Bridge 2	Compliant
200	Andrews Park Bridge 3	Compliant
200	Andrews Park Bridge 4	$ 53,000
200	Andrews Park Bridge 5	$ 53,000
200	Andrews Park Bridge 6	Compliant
200	Andrews Park Bridge 7	$ 9,000
201	Lions Park Bridge 1	$ 9,000
201	Lions Park Bridge 2	$ 5,000
	TOTAL	**$ 129,000**

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 1 (Lat. 35.22367; Long. -97.4464) **GPS ID: 200**
Bridge Length: 25 ft
City: Norman

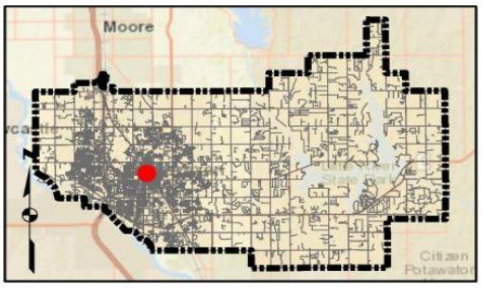
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	0	LS	$ 3,000.00	$ -
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

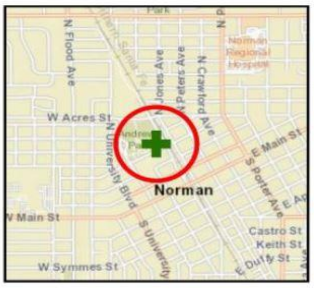
Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ -
Engineering: (% +/-)	15%	$ -
Contingency:(% +/-)	30%	$ -
Estimated Project Cost:		**$ -**

Project Location





Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface		
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top, side, or greater than 20% of bottom		
Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface	X	Install additional handrial (see sidewalk reports)

Opinion of Probable Construction Cost Disclaimer:

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1. Access, dewatering, erosion control, and restoration costs are included elsewhere.
2. Access locations will be in close proximity to projects.
3. No hydraulic studies are included. Results of these could significantly impact the cost of construction. Design fees for these are not included in the engineering allowance.
4. No changes to bridge elevations or lengths.
5. No armoring of creek banks to protect abutments is included.
6. No geotechnical engineering or survey costs are included.

Project Location Map Sources:

Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013, DigitalGlobe, GeoEye, i-cubed, USDA, AEX, Getmapping, Aerogrip, IGN, IGP, swisstopo, and the GIS User Community

End of Project Description for Project 200 Andrews Park Bridge 1

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 2 (Lat. 35.22345; Long. -97.4467) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

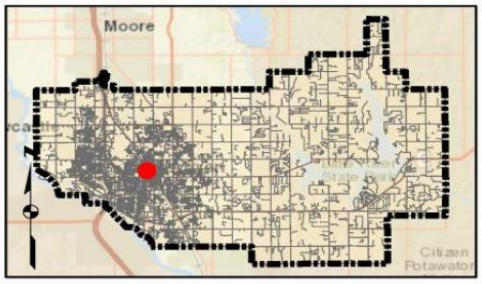
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	0	LS	$ 3,000.00	$ -
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

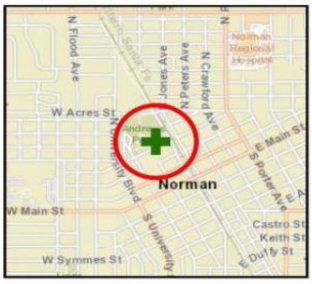
Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ -
Engineering: (% +/-)	15%	$ -
Contingency:(% +/-)	30%	$ -
Estimated Project Cost:		**$ -**

Project Location





Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface		
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
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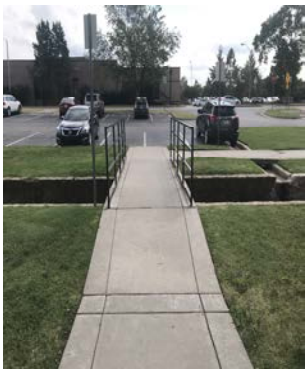
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface		





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4. No changes to bridge elevations or lengths.
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Project Location Map Sources:

Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013, DigitalGlobe, GeoEye, i-cubed, USDA, AEX, Getmapping, Aerogrip, IGN, IGP, swisstopo, and the GIS User Community

End of Project Description for Project 200 Andrews Park Bridge 2

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 3 (Lat. 35.22319; Long. -97.4473) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

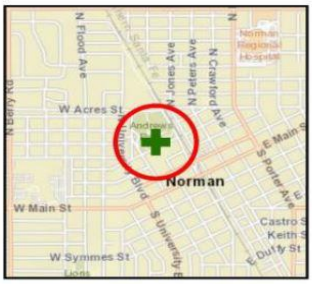
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	0	LS	$ 3,000.00	$ -
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ -
Engineering: (% +/-)	15%	$ -
Contingency:(% +/-)	30%	$ -
Estimated Project Cost:		**$ -**

Project Location



Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface		
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top, side, or greater than 20% of bottom		
Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface		





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2. Access locations will be in close proximity to projects.
3. No hydraulic studies are included. Results of these could significantly impact the cost of construction. Design fees for these are not included in the engineering allowance.
4. No changes to bridge elevations or lengths.
5. No armoring of creek banks to protect abutments is included.
6. No geotechnical engineering or survey costs are included.

Project Location Map Sources:

Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013, DigitalGlobe, GeoEye, i-cubed, USDA, AEX, Getmapping, Aerogrip, IGN, IGP, swisstopo, and the GIS User Community

End of Project Description for Project 200 Andrews Park Bridge 3

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 4 (Lat. 35.22304; Long. -97.4476) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

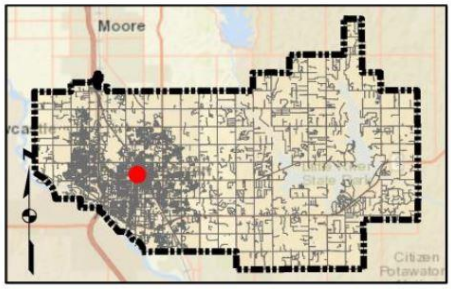
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Site Preparation, Access and Dewatering	1	LS	$ 5,000.00	$ 5,000.00
2	Bridge and Channel Wall Demolition	1	LS	$ 2,500.00	$ 2,500.00
3	Reinforced Concrete Bridge Abutment Footing	5	CY	$ 750.00	$ 3,750.00
4	Reinforced Concrete Bridge Abutment Backwall	6	CY	$ 850.00	$ 5,100.00
5	Repair Existing Masnry Walls at Abutment Connections	1	LS	$ 1,500.00	$ 1,500.00
6	Prefabricated Steel Ped Bridge	1	LS	$ 10,000.00	$ 10,000.00
7	Prefabricated Steel Handrail	30	LF	$ 75.00	$ 2,250.00
8	Sidewalk Replacment	30	SY	$ 50.00	$ 1,500.00
9	Irrigation Repairs	1	LS	$ 1,500.00	$ 1,500.00
10	Sod to Match Existing	150	SY	$ 5.00	$ 750.00

Basis for Cost Projection
- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ 33,850.00
Engineering: (% +/-)	25%	$ 8,704.55
Contingency:(% +/-)	30%	$ 10,445.45
Estimated Project Cost:		**$ 53,000.00**

Notes: 1. All items and quanities are conceptual only and assume replacement of bridge. No design has been performed, and other solutions may exist to achieve compliance. 2. No costs have been included for traffic control for vehicles or pedestrians. 3. Assumes access is close and no special effort required to perform work.

Project Location

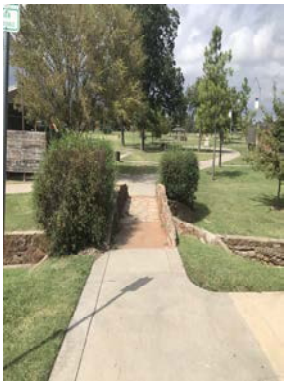


Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%	X	Replace bridge deck
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck	X	Replace bridge deck
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface		
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top or side		
Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		

Kimley-Horn and Associates, Inc.	Andrews Park Bridge 4
Photographs	GPS ID: 200



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End of Project Description for Project 200 Andrews Park Bridge 4

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 5 (Lat. 35.22288; Long. -97.4478) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Site Preparation, Access and Dewatering	1	LS	$ 5,000.00	$ 5,000.00
2	Bridge and Channel Wall Demolition	1	LS	$ 2,500.00	$ 2,500.00
3	Reinforced Concrete Bridge Abutment Footing	5	CY	$ 750.00	$ 3,750.00
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8	Sidewalk Replacment	30	SY	$ 50.00	$ 1,500.00
9	Irrigation Repairs	1	LS	$ 1,500.00	$ 1,500.00
10	Sod to Match Existing	150	SY	$ 5.00	$ 750.00
					$ -
					$ -
					$ -
					$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ 33,850.00
Engineering: (% +/-)	25%	$ 8,704.55
Contingency:(% +/-)	30%	$ 10,445.45
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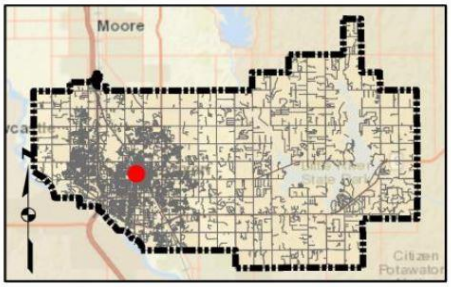
Project Location



Field Observations

Bridge Issues		Recommendations
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Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck	X	Replace bridge deck
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Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		

Opinion of Probable Construction Cost Disclaimer:

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4. No changes to bridge elevations or lengths.
5. No armoring of creek banks to protect abutments is included.
6. No geotechnical engineering or survey costs are included.

Project Location Map Sources:

Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013, DigitalGlobe, GeoEye, i-cubed, USDA, AEX, Getmapping, Aerogrip, IGN, IGP, swisstopo, and the GIS User Community

End of Project Description for Project 200 Andrews Park Bridge 5

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 6 (Lat. 35.22273; Long. -97.4481) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

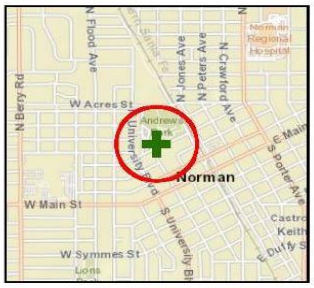
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	0	LS	$ 3,000.00	$ -
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ -
Engineering: (% +/-)	15%	$ -
Contingency:(% +/-)	30%	$ -
Estimated Project Cost:		**$ -**

Project Location



Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface		
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top, side, or greater than 20% of bottom		
Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface	X	Install additional handrial (see sidewalk reports)

Opinion of Probable Construction Cost Disclaimer:

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4. No changes to bridge elevations or lengths.
5. No armoring of creek banks to protect abutments is included.
6. No geotechnical engineering or survey costs are included.

Project Location Map Sources:

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End of Project Description for Project 200 Andrews Park Bridge 6

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Andrews Park Bridge 7 (Lat. 35.22297; Long. -97.4482) **GPS ID: 200**
Bridge Length: 10 ft
City: Norman

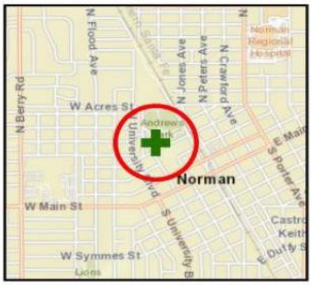
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	2	LS	$ 3,000.00	$ 6,000.00
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ 6,000.00
Engineering: (% +/-)	15%	$ 1,000.00
Contingency:(% +/-)	30%	$ 2,000.00
Estimated Project Cost:		**$ 9,000.00**

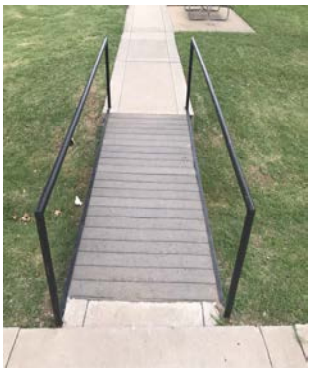
Project Location



Field Observations

Bridge Issues		Recommendations
Bridge deck running slope is greater than 8.33%		
Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface	X	Remove and replace handrail
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top, side, or greater than 20% of bottom		
Where provided, horizontal projection is less than 1.5 inches below the bottom of the handrail gripping surface		
Handrail gripping surfaces with a circular cross section have an outside diameter less than 1.25 inches or greater than 2 inches		
Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface	X	Install additional handrial (see sidewalk reports)



Opinion of Probable Construction Cost Disclaimer:

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5. No armoring of creek banks to protect abutments is included.
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Project Location Map Sources:

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End of Project Description for Project 200 Andrews Park Bridge 7

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Lions Park Bridge 1 (Lat. 35.21356; Long. -97.4538) **GPS ID: 201**
Bridge Length: 10 ft
City: Norman

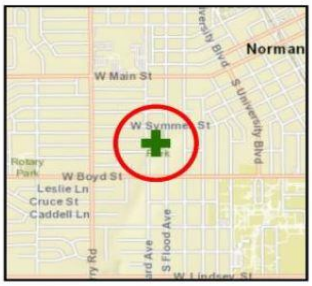
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	2	LS	$ 3,000.00	$ 6,000.00
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ 6,000.00
Engineering: (% +/-)	15%	$ 1,000.00
Contingency:(% +/-)	30%	$ 2,000.00
Estimated Project Cost:		**$ 9,000.00**

Project Location



Field Observations

Bridge Issues		Recommendations
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Clear width of bridge (or between handrails, if provided) is less than 36 inches		
Bridge deck cross slope is greater than 2.08%		
The rise of the bridge deck run is greater than 30 inches		
Vertical discontinuity greater than 1/4 inch in bridge deck		
The landing at the end of the bridge has a slope greater than 2.08%		
The landing width at the end of the bridge is less than bridge width		
The landing length at the end of the bridge is less than 60 inches		
Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
Handrails are not provided where the bridge deck running slope is greater than 5% and rise is greater than 6 inches		
The surface of the bridge deck does not extend at least 1 foot beyond the inside face of the handrail OR a barrier is not provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish surface		
Handrail is not provided on both sides of the bridge deck		
Handrail is not provided along the full length of the bridge deck		
The top of the gripping surface of handrail is less than 34 inches or greater than 38 inches above walking surface	X	Remove and replace handrail
Clearance between handrail gripping surface and adjacent surface is less than 1.5 inches		
Handrail gripping surface is not continuous along length		
Handrail gripping surface is obstructed along top, side, or greater than 20% of bottom	X	Remove and replace handrail
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Handrail gripping surfaces with a non-circular cross section have perimeter dimension of less than 4 inches or greater than 6.25 inches or cross-section dimension greater than 2.25 inches		
Handrail gripping surface or adjacent surface has sharp or abrasive elements or non-rounded edges		
Handrails extend horizontally above the landing for less than 12 inches beyond the edge of the bridge deck		
Pavement leading up to bridge is elevated from ground surface	X	Install additional handrial (see sidewalk reports)

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End of Project Description for Project 201 Lions Park Bridge 1

Kimley-Horn and Associates, Inc. **Priority: Medium**
Project Description for Park Pedestrian Bridge

Client: City of Norman **Date: 5/1/18**
Program: ADA Self-Evaluation and Transition Plan **Prepared By: MB**
KHA No.: 061298800 **Checked By: CMP**

Project Name: Lions Park Bridge 2 (Lat. 35.21304; Long. -97.4541) **GPS ID: 201**
Bridge Length: 10 ft
City: Norman

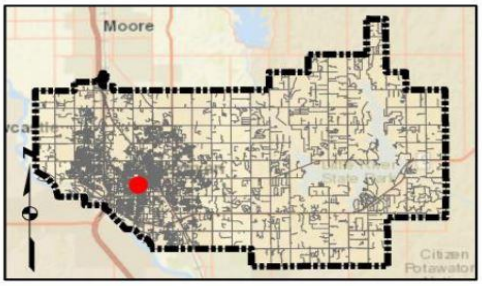
Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Coffer Dam and Dewatering	0	LS	$ 20,000.00	$ -
2	Weir Demolition	0	LS	$ 20,000.00	$ -
3	24" Reinforced Concrete Piers	0	LF	$ 150.00	$ -
4	Reinforced Concrete Weir	0	CY	$ 600.00	$ -
5	Reinforced Concrete Riprap	0	SY	$ 30.00	$ -
6	18" Rock Riprap	0	CY	$ 120.00	$ -
7	Sawcut Vertical Discontinuity	0	EA	$ 150.00	$ -
8	Repair Pitting Concrete	0	EA	$ 150.00	$ -
9	Concrete Trail Replacement	0	SY	$ 30.00	$ -
10	Bridge and Approach Railing	1	LS	$ 3,000.00	$ 3,000.00
11	Bridge Abutments	0	EA	$ 30,000.00	$ -
12	Bridge Approach Paving	0	SY	$ 75.00	$ -
13	Bridge Demolition	0	LS	$ 30,000.00	$ -
14	Set New Ped Bridge	0	LS	$ 75,000.00	$ -

Basis for Cost Projection

- ☑ No Design Completed
- ❑ Preliminary Design
- ❑ Final Design

Subtotal:		$ 3,000.00
Engineering: (% +/-)	15%	$ 666.67
Contingency:(% +/-)	30%	$ 1,333.33
Estimated Project Cost:		**$ 5,000.00**

Project Location



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Bridge Issues		Recommendations
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Vertical discontinuity greater than 1/4 inch at sidewalk connection to bridge deck		
Joint width greater than 1/2 inch at sidewalk connection to bridge deck		

Handrail Issues		Recommendations
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Pavement leading up to bridge is elevated from ground surface	X	Install additional handrial (see sidewalk reports)

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End of Project Description for Project 201 Lions Park Bridge 2