

1000's of details—one project: Project Management

2019 Florida Recreation and Park Association
Annual Conference

Chris Nunes, CPRE
Director of Parks and Recreation
The Woodlands Township (Texas)



FRPA

**FLORIDA RECREATION
& PARK ASSOCIATION**

Objectives



- Review the project management process from *bid to close out*
- Identify methods in which to reduce cost, project time line and *overall adherence to specifications*
- Identify terms and language related to project management



"Expect the best, plan for the worst, and prepare to be surprised." ~ Denis Waitley

Project Management



“Project management is the art of creating an illusion that any outcome is the result of a series of predetermined, deliberate acts when, in fact, it was dumb luck.”

Harold Kerzner, *Project Management*, pg. 3



Project Management



Project management is the planning, organizing, directing, and controlling of *company resources* for a relatively *short term objective* that has been established to *complete specific goals* and objectives.”

Harold Kerzner, *Project Management*, pg. 4



Project Management



What is a Project?

- Standards and specifications
- Start and end dates;
- Funding constraints
- Resources heavy (time, money, people, & equipment)



Project Management



Constraints

- Scope
- Time
- Resources
- Public Need/Demand (time)



Where do we traditionally have issues???

Successful Project Management



- Within specifications
- Within allotted time period
- Within the budgeted costs
- Accepted by the customer/user
- Minimal and mutual scope changes
- Without disturbing workflow (other projects)
- Other??



Project Managers Role

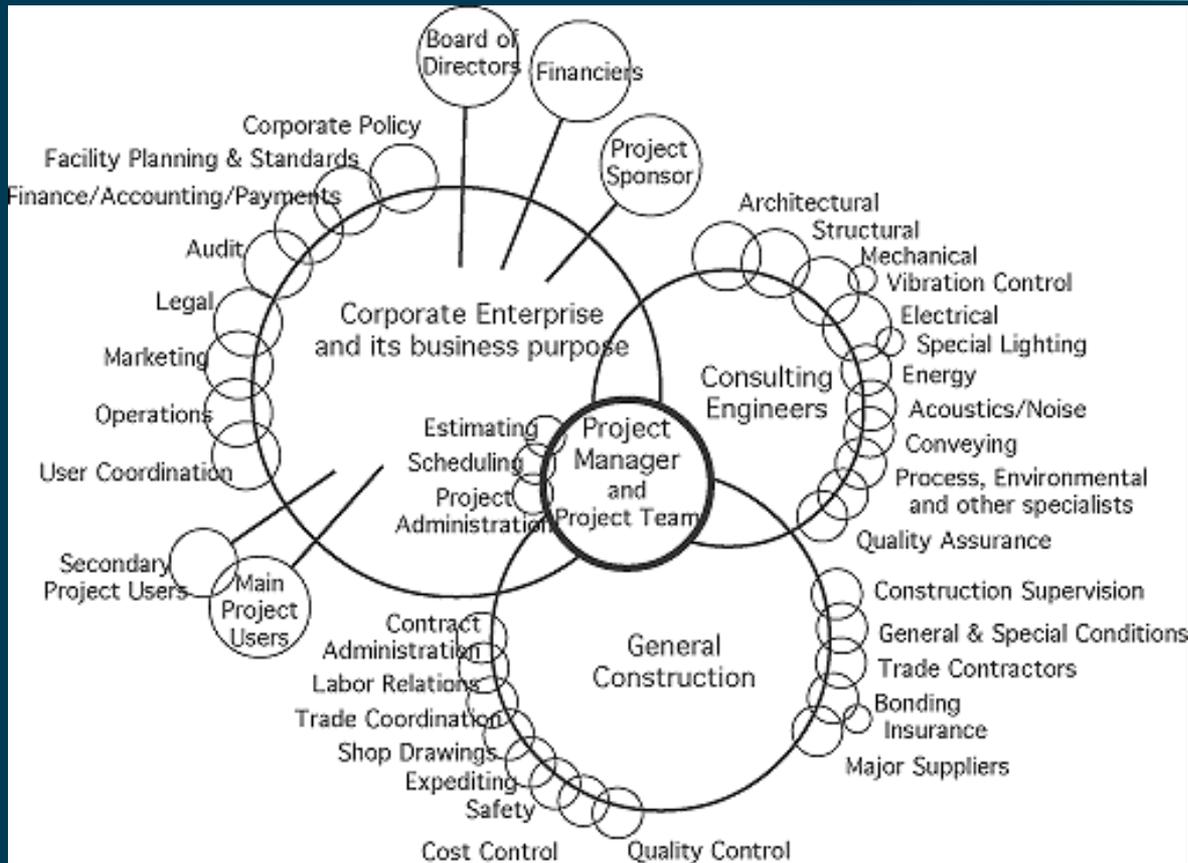


Responsible for coordinating, integrating and *negotiating* activities across multiple and functional groups

Who are these groups??



Multiple Groups????????????????????



Project Managers- To be successful



- Strong communication skills
- Strong interpersonal skill
- Balance technical and managerial functions
- Overcome organizational constraints;
- Cope with and survive risks



Project Managers- specific skills



- Team Building
- Leadership
- Conflict Resolution
- Technical Expertise
- Planning
- Organizing
- Entrepreneurship
- Administration
- Management support
- Resource allocation



Impact of Poor Project Management



- Delays
- Increased Cost
- Waste of Resources
- Quality
- Dissatisfaction
- Reputation



What is a Critical Path/Timeline??



“*Sequence of activities* in a project plan which must be completed on time for the project to *complete on due date*”

An activity on the critical path cannot be started until its *predecessor activity* is complete; if it is delayed for a day, the entire *project will be delayed* for a day unless the activity following the delayed activity is completed a day earlier.

What is a Critical Path/Timeline??

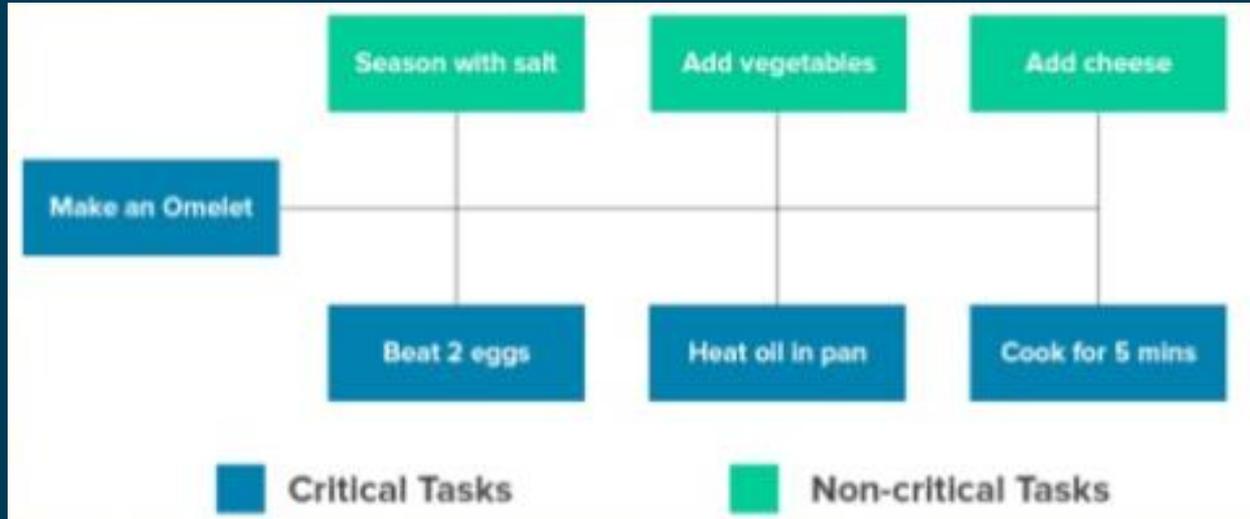


Timeline for project which includes:

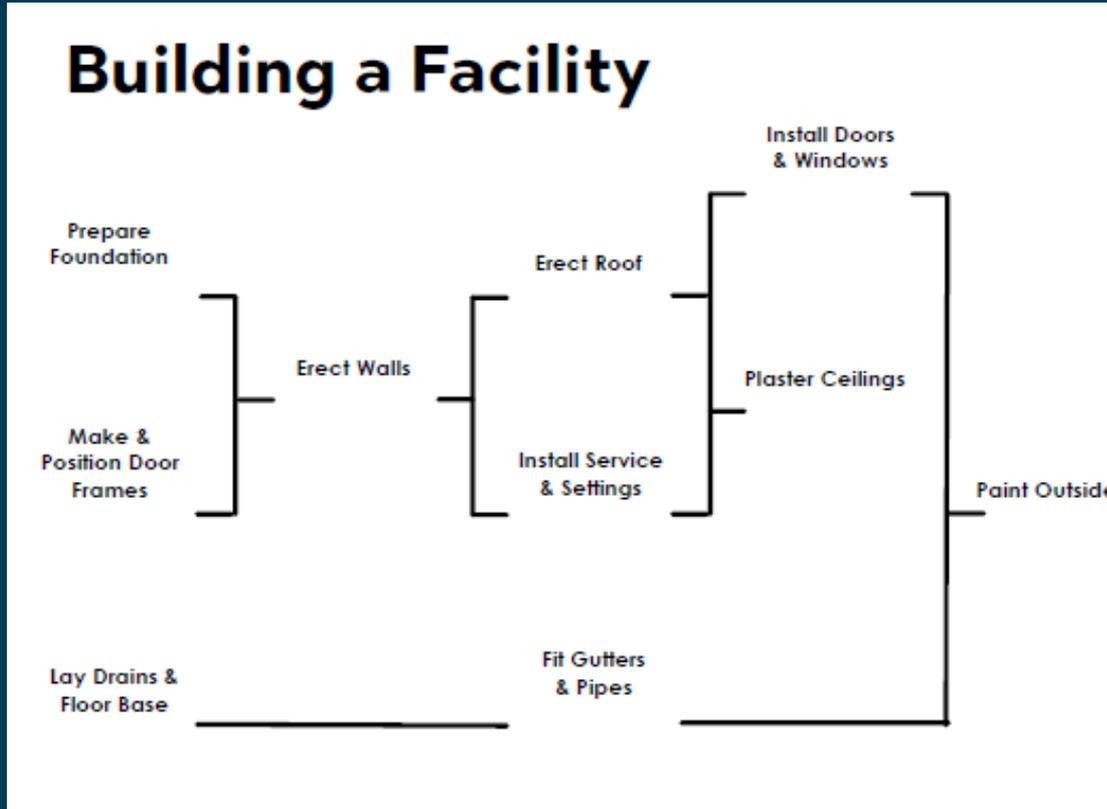
- All activities required
- Duration each activity takes
- Dependencies between the activities and,
- Logical end points such as milestones



Critical Path/Timeline??



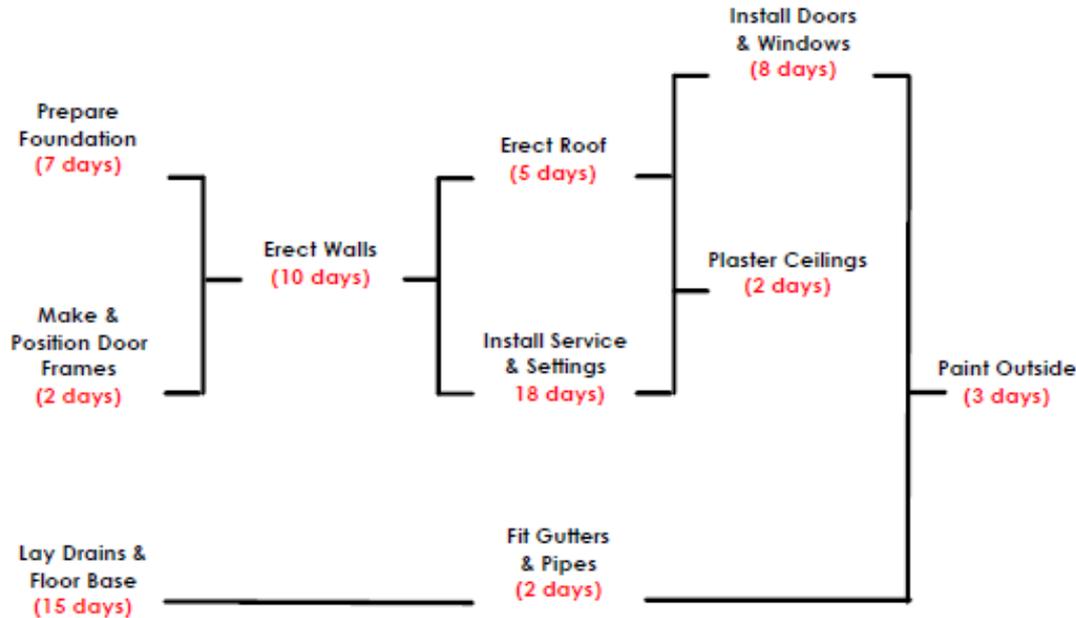
Critical Path/Timeline??



Critical Path/Timeline??



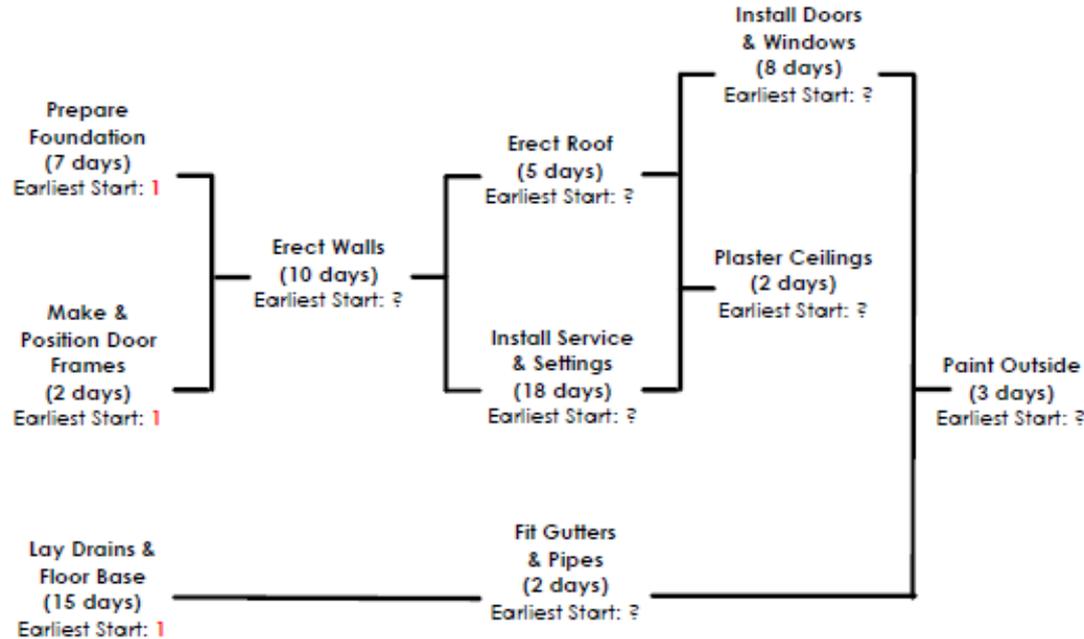
Building a Facility



Critical Path/Timeline??



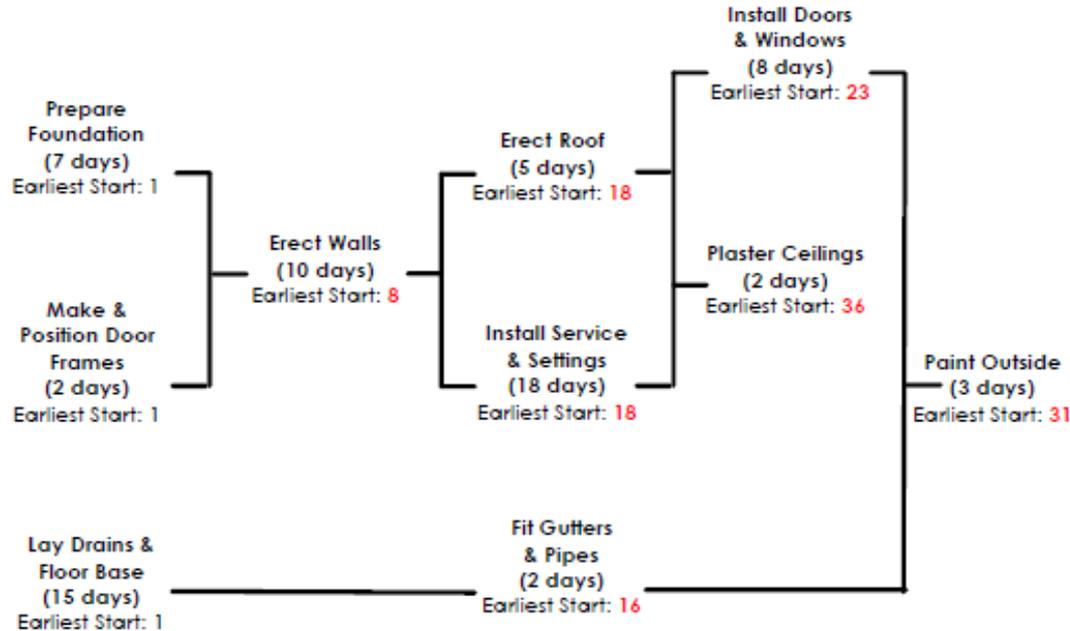
Building a Facility



Critical Path/Timeline??



Building a Facility



Critical Path/Timeline??

- Failure to understand time for each task
- **Interdependency** on time for each task
- Build in weather, meetings, holidays,
- Disruptions of schedule- **political, shipping, internal**



How does this go from bid to reality??



How does this go from bid to reality??



How does this go from bid to reality??



Bid to Reality-Components



- Planning-
Creating/then fine tuning, the overall project plan
- Monitoring,
tracking &
reporting progress



How does this go from bid to reality?



No matter the size of the project there are some **fundamental keys** to the management of the project!

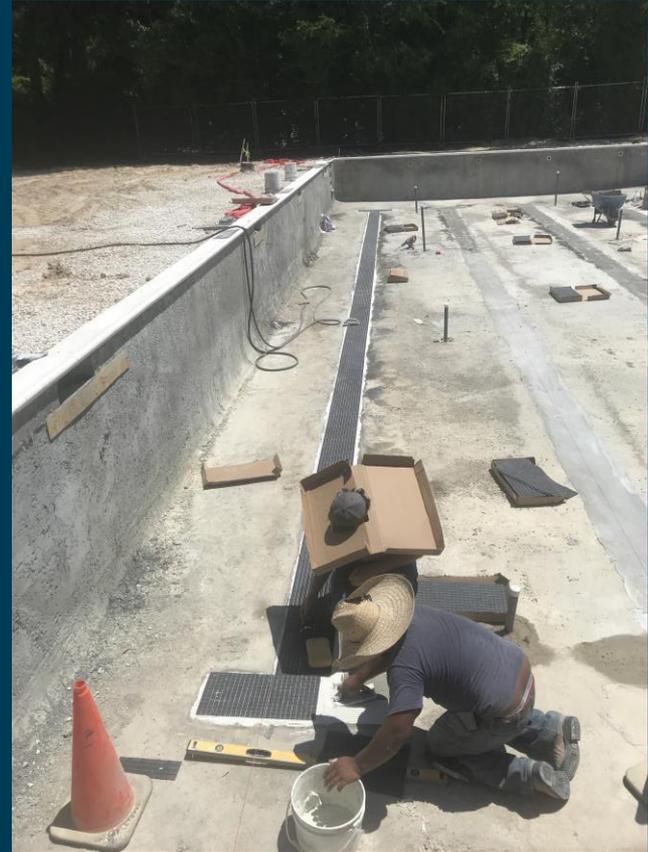
- Award of Bid
- Contract Execution
- Pre Construction
- Construction/Contract Management
- Punch List
- Substantial Completion
- Final Acceptance of Work



Award of Bid

City/Agency has received multiple bids for the project- Now what??

- Does bid meet all standards- YES/NO
- Bonds- Bid, Performance, Payment
- Reference checks
- Who is the **lowest responsive bid**?
- Do you need to award to the lowest responsive bid?



Award of Bid



- What is the role of a bond?
- Protect the agency
- **Cost** will be borne by the agency
- Assures the financial viability of a contractor
- Other???

ALLMERICA FINANCIAL
CITIZENS INSURANCE
HANOVER INSURANCE

The Hanover Insurance Company
Massachusetts Bay Insurance Company
440 Lincoln Street
Worcester, MA 01653

Citizens Insurance Company
of America
645 West Grand River
Howell, MI 48843

PERFORMANCE BOND

BOND NO.: 1064503

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A312

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):
Hou-Scape, Inc.
17725 Telge Road
Cypress, TX 77429

SURETY (Name and Principal Bond Office):
The Hanover Insurance Company
440 Lincoln Street
Worcester, MA 01653

OWNER (Name and Address):
The Woodlands Township
2801 Technology Forest Boulevard, The Woodlands, TX 77381

CONSTRUCTION CONTRACT
Date:
Amount: \$2,879,230.06 Two Million Eight Hundred Seventy Nine Thousand Two Hundred Thirty Dollars and 00/100

Description (Name and Location): Bear Branch Park Phase I and Phase III located at 5200 Research Forest Drive, The Woodlands, Texas 77381

BOND
Date (Not earlier than Construction Contract Date):
Amount: \$2,879,230.06 Two Million Eight Hundred Seventy Nine Thousand Two Hundred Thirty Dollars and 00/100

Modifications to this Bond: None See Page 3

CONTRACTOR AS PRINCIPAL
Company: Hou-Scape, Inc. (Corporate Seal)

SURETY
Company: The Hanover Insurance Company (Corporate Seal)

Signature: *Paula Hill*
Name and Title: Paula Hill / President

Signature: *Rebecca Garza*
Name and Title: Rebecca Garza / Attorney-in-Fact

(Any additional signatures appear on page 3)

(FOR INFORMATION ONLY - Name, Address and Telephone)
AGENT or BROKER: Technical Assurance, L.L.C.
26623 Oak Ridge Drive
The Woodlands, TX 77380
281-296-9997

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

AIA DOCUMENT A312 - PERFORMANCE BOND - DECEMBER 1994 ED. - AIA®
THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVE., N.W., WASHINGTON, D.C. 20005

141-0772 (10/04)

Award of Bid-



Bid Tabulation Form for Bear Branch Park Phase I and III

	Millis Dev	Houscape	Gadberry
Phase I only	\$2,933,096.75	\$2,360,204.14	\$2,578,782.68
Phase III only	\$829,966.66	\$925,858.86	\$1,114,030.85
Phase I and III (one vendor)	\$3,742,263.41	\$3,286,063.00	\$3,692,813.53
Phase I + III (multiple vendors)	\$3,190,170.80		
Phase I + III-(multiple vendors savings)	\$95,892.20		
Phase I only	\$2,933,096.75	\$2,360,204.14	\$2,578,782.68
Phase III only	\$829,966.66	\$925,858.86	\$1,114,030.85
Parking Lot Deduct	-\$272,724.00	-\$406,832.94	-\$608,398.25
Revised Parking Lot (Phase III Only)	\$829,966.66	\$119,023.92	\$505,632.60
Phase I + Lowest Revised Phase III (one vendor)	\$3,490,339.41	\$2,879,230.06	\$3,084,415.28
Phase I + III (multiple vendors)	\$2,865,836.74		
Phase I + III-(multiple vendors savings)	\$13,393.22		

Contract Execution

Ughhhhh....
Time to make
nice with Legal
Counsel



Contract Execution

Key elements in your contract

- **Scope of Work**
- Insurance
- **Supply of Utilities**
- What is a working day/rain day?
- **Permits**
- Schedule
- **Liquated Damages**
- Safety of site
- **Losses from natural causes**
- **Constriction Plans/Specifications**



Contract Execution



Scope of Work

Provide all necessary labor, materials, supplies, permits, and equipment to renovate and/or build Bear Branch Park Phase I and III which includes but is not limited to: pool renovation, pool bathhouse renovation, new maintenance building, parking lot renovation/expansion (Deduct Alt A), and landscape improvements, as outlined in the plans attached and developed by Burditt Land Place inclusive of any and all coordination with permitting entity.

Provide a concept of the work proposed

- Work proposed
- Size of project
- Trades needed

Contract Execution



Supply of Utilities

12. WATER AND ELECTRICITY DURING CONSTRUCTION

The Owner may provide water and electricity in support of the Contractor at existing facilities within the site of the Work. If so provided, the Contractor shall make all connections, furnish all necessary extensions, and remove same upon completion of the Work.

Important due to:

- Cost to install utilities
- Cost for services
- Timeline

Contract Execution



Permits

13. PERMITS

Permits and licenses, inclusive of SWPPP, water taps and other service connections, necessary for the prosecution of the Work shall be secured and paid for by the Contractor.

Important due to:

- Timeline- permit, review, inspection, re inspection
- Do you understand electrical usage?
- Relationships with other city/districts
- Cost for services

Contract Execution



Liquated Damages

41. LIQUATED DAMAGES

Time is of the essence of the Contract. Delays inconvenience the traveling public, obstruct traffic, interfere with and delay commerce, and increase risk to roadway users. Because the Owner finds it impractical to calculate the actual cost of delays, it has adopted the following formula to calculate liquidated damages for failure to complete the Work of the Contract on time. Accordingly, the Contractor agrees:

- a) To pay \$1250 liquidated damages for each Working Day beyond the number of working days established for completion of the Work; and
- b) To authorize the Owner to deduct these liquidated damages from any money due or coming due to the Contractor.

Important to:

- Manage timeline
- Manage damages to agency

Contract Execution



Losses from natural causes

36. LOSSES FROM NATURAL CAUSES

All loss or damage to the Contractor, arising out of the nature of the Work to be done, or from the action of the elements, or from any unforeseen circumstances in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the Work, shall be sustained and borne by the Contractor at his sole cost and expense.

Important due to:

- What happens if there is a flood?
- What happens if there is a tornado?
- What happens if there is a leak?

Pre Construction Meeting



- Notice to proceed
- Mobilization
- Key Contacts (staff, inspectors, owner's rep, agent's rep)
- Progress meetings
- Payment schedule
- Project schedule



Pre Construction Meeting



Notice to proceed

- Contract start date
- Contract end date
- **Key to damages**



November 30, 2017

Paula Hill
President/Owner
Hou-Scape
17725 Telge Road
Cypress TX 77429

RE: Bear Branch Park Renovation Phase I and III C-2017-0419

Dear Paula

Please consider this your official Notice to Proceed on the project named above. You are hereby authorized to proceed with construction as of December 5, 2017. The Work shall be completed by June 1, 2018 as specified in the contract documents.

Please ensure that all submittals required by the Contract Documents have been submitted and reviewed by the Owner or Owner's designated representative (Burditt) prior to ordering any related materials or completing any related work. Work cannot begin until all applicable submittals have been reviewed.

The Township has appointed Chris Nunes as the Township's Representative who will be your single point of contact. If you have any questions, please contact me at cnunes@thewoodlandstownship-tx.gov or 936-672-3907

Sincerely,

Chris Nunes
Director of Parks and Recreation

Pre Construction Meeting



Key Contacts

- One for each side
- How does communication work between each side?
- What authority does each have to make decisions?

Project management is somewhat akin to marriage- give and take



Pre Construction Meeting



- Payment schedule
- Net 10 or net 30?
- **RETAINAGE!!!!!!**
- When does the clock start for payment?
- Release of liens against owner

TO OWNER:	PROJECT:	APPLICATION NO.:
The Woodlands Township 2801 Technology Forest Drive The Woodlands, Texas 77381 Attn: Chris Nunes	Bear Branch Park Pool Renovations Ph. I & II	10 PERIOD TO: 6/28/2018 PROJECT NO: C-2017-0419
FROM CONTRACTOR:	VIA ARCHITECT:	CONTRACT DATE:
Hou-Scape Inc. P.O. Box 2449 Cypress, Texas 77410	Burditt Consultants 310 Langmire Road Conroe, Texas 77302 Contract For: Sitework, Landscape & Irrigation	12/5/2017 (NTP)

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

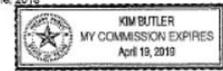
- 1. Original Contract Sum **\$2,879,230.60**
- 2. Net change by Change Order..... **(\$21,411.09)**
- 3. Contract Sum To Date..... **\$2,857,819.51**
- 4. Total Completed & Stored To Date.. **\$2,722,547.78**
- 5. Retainage:
 - a. 10% of completed work \$190,445.19
 - b. ____% of Stored Material
 - Total Retainage..... **\$272,254.78**
- 6. Total Earned Less Retainage..... **\$2,450,293.00**
- 7. Less Previous Cert. for Payment... **\$2,125,596.38**
- 8. Current Payment Due..... **\$324,696.62**
- 9. Balance to Finish, And Retainage.. **\$407,526.51**

The undersigned Contractor certifies to the best Contractor's knowledge, information and belief that the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for the work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment as shown herein

Contractor:
By: Paula Hill Date: 6/28/18
Paula Hill

State of: Texas
County of: Harris
Subscribed and sworn to before me this 28th day of June, 2018

Kim Butler
Notary Public: Kim Butler
My Commission expires: April 19, 2019



In accordance with the Contract document, based on on-site observation and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED..... \$.....

ARCHITECT: _____ DATE: _____

CHANGE ORDER SUMMARY	Additions	Deductions
Total change approved in previous months by Owner	\$ 7,437.25	\$(30,796.34)
Total approved this month	\$ 1,950.00	\$(23,361.09)
Totals		\$(21,411.09)
Net Change by Change Order		

Pre Construction Meeting



Project Schedule

- Start/Finish dates
- **Critical path** items
- Realistic times
- **Impact on park/community functions?**
- Other?

CHALLENGE DESIGN INNOVATIONS

The Woodlands Township- Rob Flemming Adventure Course Construction Schedule

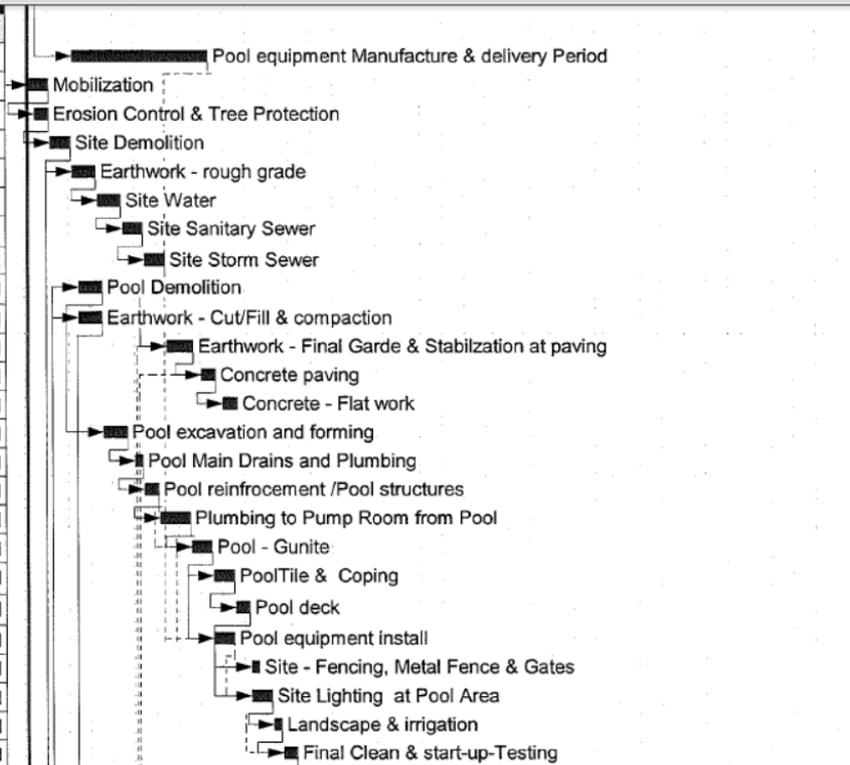
- October 1-7: Week 1
 - Pre-construction meeting (October 2).
 - Establish jobsite and receive materials (poles delivered morning of October 3).
 - Confirm course layout and set all course poles (course, tower, and H-frame poles).
 - Begin installing course transfer platforms.
- October 8-14: Week 2
 - Complete setting course poles.
 - Dig and pour concrete dead men foundations.
 - Continue installing course transfer platforms.
 - Begin tower framing.
- October 15-21: Week 3
 - Continue installing course transfer platforms.
 - Continue tower framing/decking.
 - Install all guy wire systems.
 - Begin installing course elements.
- October 22-28: Week 4
 - Continue installing course transfer platforms.
 - Complete tower framing/decking.
 - Install tower stairs.
 - Complete installing guy wires.
 - Continue installing course elements.
- October 29-November 4: Week 5
 - Continue installing course transfer platforms.
 - Continue installing course elements.
- November 5-11: Week 6
 - Continue installing course transfer platforms.
 - Continue installing course elements.
- November 12-18: Week 7
 - Continue installing course transfer platforms.
 - Continue installing course elements.
- November 19-25: Week 8
 - Thanksgiving Break
- November 26 - December 2: Week 9
 - Complete construction.
 - Address punch list items.
- December 3-9: Week 10
 - Commissioning and Acceptance Inspection (site representatives must be on site and sign)
- January- Level 1 Training.
- February 1- Course Opening.

Pre Construction Meeting



Pool & Deck

1065	Pool equipment Manufacture & delivery	30d	30d	19DEC17	31JAN18	60d
1070	Mobilization	5d	5d	05DEC17	11DEC17	1d
1080	Erosion Control & Tree Protection	3d	3d	07DEC17	11DEC17	1d
1090	Site Demolition	5d	5d	12DEC17	18DEC17	1d
1095	Earthwork - rough grade	5d	5d	19DEC17	26DEC17	71d
1100	Site Water	5d	5d	27DEC17	03JAN18	71d
1110	Site Sanitary Sewer	5d	5d	04JAN18	10JAN18	71d
1120	Site Storm Sewer	5d	5d	11JAN18	17JAN18	71d
1140	Pool Demolition	5d	5d	21DEC17	28DEC17	56d
1160	Earthwork - Cut/Fill & compaction	5d	5d	21DEC17	28DEC17	1d
1180	Earthwork - Final Garde & Stabilization	7d	7d	18JAN18	26JAN18	71d
1200	Concrete paving	5d	5d	29JAN18	02FEB18	71d
1210	Concrete - Flat work	5d	5d	05FEB18	09FEB18	71d
1265	Pool excavation and forming	5d	5d	29DEC17	05JAN18	56d
1270	Pool Main Drains and Plumbing	3d	3d	08JAN18	10JAN18	56d
1280	Pool reinforcement /Pool structures	3d	3d	11JAN18	15JAN18	56d
1285	Plumbing to Pump Room from Pool	8d	8d	16JAN18	25JAN18	56d
1290	Pool - Gunite	5d	5d	26JAN18	01FEB18	56d
1310	PoolTile & Coping	5d	5d	02FEB18	08FEB18	56d
1320	Pool deck	3d	3d	09FEB18	13FEB18	56d
1325	Pool equipment install	5d	5d	02FEB18	08FEB18	59d
1390	Site - Fencing, Metal Fence & Gates	3d	3d	14FEB18	16FEB18	66d
1490	Site Lighting at Pool Area	5d	5d	14FEB18	20FEB18	56d
1493	Landscape & irrigation	3d	3d	21FEB18	23FEB18	56d
1495	Final Clean & start-up-Testing	5d	5d	24FEB18	28FEB18	56d



Start date 05DEC17

Finish date 16MAY18

Legend:
 Early bar
 Progress bar

Construction Administration



- Request for Information (RFI)
- Pay Applications
- Change Orders
- Progress meetings
- Production schedule
- Testing
- Daily monitoring



Construction Administration



Request for Information (RFI)

- Uncertainty of products, materials, approach
- May suggest a difference material
- Provides for and documents potential changes/communication



P.O. Box 2449
Cypress, Texas 77410

REQUEST FOR INFORMATION

RFI #:
004
Date Sent:
1/13/17
Project Name:
Northshore Park
Project No.:

To:
**Leroy Collins
Burditt**

From:
**Steve Hill
Hou-scape**

Question:

During our meeting Wednesday we discussed two issues with the front CMU wall at the Restrooms they are as follows:

- 1) The existing wall has an existing Bond Beam 3 blocks down from the top, Do we need an additional double bond beam as shown on Structural drawing Detail 9/S-2.0. If so this would require additional demo of the existing CMU wall that was not shown on the Demo drawing A0.01 of everything above the 9'-4" height to be removed as the new double bond beam appears to be started at a height of 8'-0".
- 2) The existing height of the wall with or without the new double bond beam is or will be at a height of 9'-4" and the space between that and the bottom of the new roof rafters is only 5'-3 1/2" while Detail C3 on sheet A2.01 shows the height of the Decorative Screen to be 6'-1/4" and it will not fit as designed.
- 3) Whether the additional double bond beam is required or not I would suggest that an additional row of blocks be removed so that the top of the CMU wall is at a finished height of 8'-7 1/2" as that would accommodate the Decorative Screen and wood framing as designed.

Please advise

Response:

Construction Administration



Pay Applications

- Retainage- 10%
- Tracking project budget
- Net 30 days
- Who reviews the pay application- project manager, consultant, other?

APPLICATION AND CERTIFICATION FOR PAYMENT

TO OWNER: Woodlands Township, 6464 Creekside Forest Drive, Woodlands, TX 77389
 FROM CONTRACTOR: Challenge Design Innovations, Inc., PO Box 219, Pineola, North Carolina 28662
 PROJECT: Adventure Course at Rob Fleming Park, C-2018-0382
 CERTIFIER: [Blank]

APPLICATION NO: 5
 PERIOD TO: 11/21/18
 CONTRACT DATE: 9/1/18
 AIA DOCUMENT G703

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1 ORIGINAL CONTRACT SUM	\$	533,538.08
2 Net change by Change Orders	\$	0.00
3 CONTRACT SUM TO DATE (Line 1 + 2)	\$	533,538.08
4 TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$	445,066.04
5 RETAINAGE:		
a. 0.1 % of Completed Work (Column D + E on G703)	\$	445,066.04
b. 0.1 % of Stored Material (Column F on G703)	\$	\$0.00
Total Retainage (Line 5a + 5b or Total as Column I of G703)	\$	445,066.04
6 TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)	\$	400,559.94
7 LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificates)		295,330.46
8 CURRENT PAYMENT DUE	\$	105,228.98
9 BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	\$	132,978.64

CHANGE ORDER SUMMARY

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous month by Owner	0.00	0.00
Total approved this Month	0.00	0.00
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment is due.

CONTRACTOR: [Signature] Lindsay Wilson
 By: Catherine M. Tail
 Notary Public: [Signature] Lindsay Wilson
 Subscribed and sworn before me this 19 day of November, 2018.
 State of NC
 My Commission expires: 10/23/2022

CERTIFIER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observation and the data accompanying the application, the Certifier certifies to the Owner that to the best of the Certifier's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED: \$ 105,228.98

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

CERTIFIER: [Signature]
 By: [Signature]
 Date: [Blank]

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

AIA DOCUMENT G703 - APPLICATION AND CERTIFICATION FOR PAYMENT - 1993 EDITION - AIA © 2012

430-190-9000-1820-31
 11/21/18
 \$105,228.98 PO # 2018-416

Construction Administration



Tracking project budget

	Date	Burditt	Date	Houscape
Contract	4/22/2017	\$286,000.00	11/19/2017	\$2,879,230.06
Change Order 1	1/18/2018	\$6,825.00	12/20/2017	-\$103,421.00
Change Order 2				
Change Order 3			12/28/2017	\$35,120.03
Change Order 4			1/22/2018	\$40,280.00
Change Order 5			3/28/2018	\$9,300.00
Change Order 6				
Change Order 7			3/28/2018	-\$12,077.40
Change Order 8				
Change Order 9			4/10/2018	\$4,945.00
Change Order 10			4/23/2018	\$2,492.50
Change Order 11			5/29/2018	\$1,950.00
Change Order 12			7/1/2018	\$750.00
Change Order 13			7/10/2016	\$4,860.00
Revised Value of Contract	\$3,156,254.19	\$292,825.00		\$2,863,429.19
Net Difference	\$8,975.87			
Payment 1	6/5/2017	\$30,000.00	12/28/2107	\$196,933.23
Payment 2	7/5/2017	\$98,670.00	2/15/2018	\$188,203.52
Payment 3	8/15/2017	\$48,262.50	2/21/2018	\$238,038.59
Payment 4	9/6/2017	\$30,387.50	3/28/2018	\$302,711.63
Payment 5	10/10/2017	\$22,301.52	4/16/2018	\$250,978.50
Payment 6	11/27/2017	\$4,075.00	4/27/2018	\$145,765.42
Payment 7	12/20/2017	\$22,021.69	5/18/2018	\$296,945.90
Payment 8	1/18/2018	\$8,580.00	5/29/2018	\$84,390.96

Vendor	Misc Expenses	Service	Amount
	Fast Signs	Banners	\$432.00
	Progressive	Whale Sign	\$15,275.00
	Terracon	Soil Study	\$2,850.00
	Terracon	Soil Study	\$1,950.00
	Terracon	Asbestos Study	\$1,750.00
	Omni	Salavage	\$125.00
	Omni	Alarm System	\$6,756.79
	Pool Chairs	Horizon Casual	\$15,112.00
	Terracon	TA10187	\$2,002.50
	Centerpoint	Move line	\$350.00
	Kilgore	Camera Sewer	\$1,604.55
	First Class Rentals	Temp Bathroom	\$1,275.00
	Terracon	TA22038	\$1,444.00
	Uretek	180057	\$25,980.12
	Burditt	Dog Park	\$3,700.00
	Terracon	TA32146	\$2,782.50
	Progressive	Chairs-Guards	\$6,517.00
	Terracon	TA44742	\$1,670.00
	Concrete Contractor	Curb Stops	\$705.58
	Big Tin Barn	Bollards	\$349.95
	Lowes		\$53.67
	Lowes		\$41.55
	Lowes		\$628.54

Total Paid		\$307,899.67	\$2,723,497.00
Total Payments	\$3,031,396.67		
Total Remaining Value- To Be Paid	\$124,857.52		
Budgeted Contingency	\$311,500.00		
Contingency Remaining	\$169,993.31		

VRC during Outage
MoCo Permit

Construction Administration



Change Orders

- Who can sign/limits?
- **Added days?**
- How to determine **correct values?**
- If there is a change does it impact other aspects of the scope/value?

CHANGE ORDER
AIA DOCUMENT G701

Distribution to:
OWNER
ARCHITECT
General Contractor
FIELD
OTHER

PROJECT:
Bear Branch Park
Pool Renovations Ph. I & III

CHANGE ORDER NUMBER: 005

INITIATION DATE: 1/26/2018

PROJECT NO: C-2017-0419

TO (Contractor): Hou-Scape, Inc.
P.O. Box 2449
Cypress, Texas 77355

CONTRACT FOR: Sitework, Landscape & Irrigation

CONTRACT DATE: 12/5/2017 (NTP)

You are directed to make the following changes in this Contract:

ADD

Hou-Scape, Inc. proposes to add Storm Sewer Pipe at West end of project, and repairs made to storm sanitary @ entrance by Research Forest Drive

1	12" HDPE for Culvert (40LF) (Materials & Labor)	\$2,500.00
1	Repair to Sanitary Storm Drain (Materials & Labor)	\$2,900.00
1	4" Isolation Valve, 4" x 2" Tapping Saddle, & 100 LF 2" PVC (This will tie into bathrooms & runs new waterline around new Maint Bldg to tie into Pool Facility Bldg.)	\$3,900.00
	<u>Total</u>	\$9,300.00

Not valid until signed by both the Owner and Architect.

Signature of the Contractor indicates his agreement herewith, including any adjustment in the contract Sum or Contract Time.

The original (Contract Sum) (Guaranteed Maximum Cost) was.....	\$2,879,080.04
Net change by previously authorized Change Orders.....	(\$28,020.94)
The (Contract Sum) (Guaranteed Maximum Cost) prior to this Change Order was.....	\$2,851,059.10
The (Contract Sum) (Guaranteed Maximum Cost) will be (increased) (decreased) (unchanged).....	increased
by this Change Order.....	\$9,300.00
The new (Contract Sum) (Guaranteed Maximum Cost) including this Change Order will be.....	\$2,860,359.10
The Contract Time will be (increased) (decreased) (unchanged) by.....	6/22/2018
The Date of Substantial Completion as of the date of this Change Order therefore is.....	

Authorized:

General Contractor
Hou-Scape, Inc.
Address
P.O. Box 2449
Cypress, Texas 77410
Date: 1/26/2018

Architect
Burditt Consultants
Address
310 Longmire Road
Conroe, Texas 77304
Date:

Owner
The Woodlands Township
Address
2801 Technology Forest Blvd
The Woodlands, Texas 77381
Date: 1/26/2018

Construction Administration



Testing

- Payment for testing
- Selection of Testing agency
- Testing soils, cement, pressure, adherence to specifications
- Who pays?
- What happens when test do not meet specifications?

Project Number: 91171209

Material Information				Sample Information							
Specified Strength	3,000 psi @	28 days		Sample Date:	04/05/18	Sample Time:	1115				
Mix ID:	2215-001			Sampled By:	Jose Jatem Montero						
Supplier:	Allied Concrete			Weather Conditions:	Sunny						
Batch Time:	1009	Plant:	NA	Accumulative Yards:	10/10	Batch Size (cy):	10				
Truck No.:	Jesus	Ticket No.:	1013960	Placement Method:	Direct Discharge						
Field Test Data											
Test	Result	Specification									
Slump (in):	6			Water Added Before (gal):	0						
Air Content (%):	3.5			Water Added After (gal):	0						
Concrete Temp. (F):	72			Sample Location:	Same as placement						
Ambient Temp. (F):	69			Placement Location:	New Spread Footings; Refer to Attached Drawing.						
Plastic Unit Wt. (pcf):											
Yield (Cu. Yds.):											
Laboratory Test Data											
Set No.	Specimen ID	Avg Diam. (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	Tested By	
1	A	6.00	28.27	04/07/18	04/12/18	7	82,080	2,900	2	JAD	
1	B	6.00	28.27	04/07/18	04/12/18	7	84,110	2,970	2	JAD	
							Average (7 days)	2,940			
1	C	6.00	28.27	04/07/18	05/03/18	28					
1	D	6.00	28.27	04/07/18	05/03/18	28					
Initial Cure: Outside				Final Cure: Water Storage Tank							
Comments: Not tested for plastic unit weight.											

Construction Administration



Progress Meetings

- Daily, weekly, bi-weekly
- Whose in attendance?
- Communication
- Tracking- progress, RFI's
- Meeting minutes
- Deliverables for next meeting

BURDITT Consultants LLC

LAND | PLACE STUDIO – Connecting People to Place

ARCHITECTURE + LANDSCAPE ARCHITECTURE + URBAN DESIGN

Meeting Minutes

Project: Bear Branch Ph 1 and Ph 3
Meeting: Progress Meeting
Location: Bear Branch Park
Date: December 13, 2017

Prepared by: Ben Mengden
Next Scheduled Meeting: January 3, 2018

Attendees:

<input checked="" type="checkbox"/>	Chris Nunes	Woodlands Township
<input checked="" type="checkbox"/>	John McGowan	Woodlands Township
<input checked="" type="checkbox"/>	Pamela Woods	Woodlands Township
<input checked="" type="checkbox"/>	Karl Shaw	Woodlands Township
<input type="checkbox"/>	Michelle Betcher	Woodlands Township
<input checked="" type="checkbox"/>	Kim Butler	Hou-Scape Construction
<input checked="" type="checkbox"/>	Bill Hilbun	Hou-Scape Construction
<input checked="" type="checkbox"/>	Eric Geppelt	Burditt
<input checked="" type="checkbox"/>	Courtney Brinegar	Burditt
<input checked="" type="checkbox"/>	Ben Mengden	Burditt

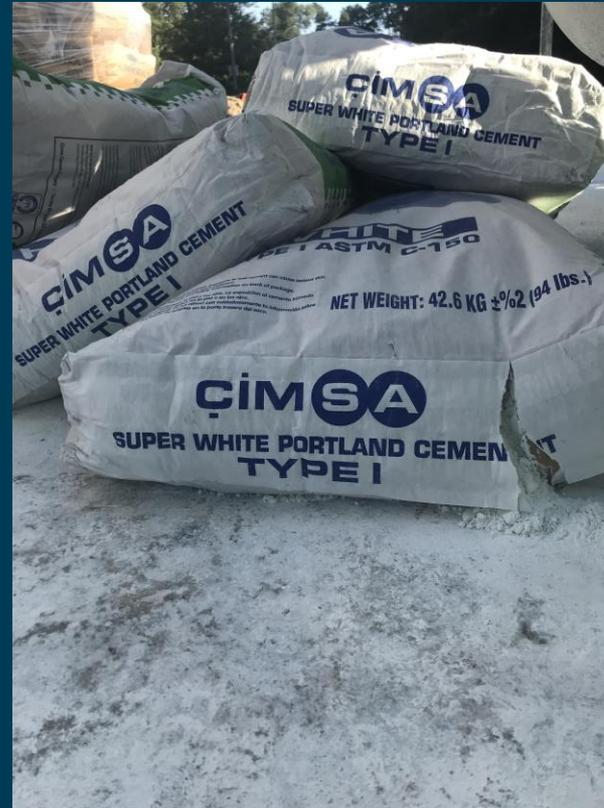
The following are items were discussed as recorded by Burditt Consultants and represent the minutes of the meeting. Comments, errors, and/or omissions to these minutes shall be made in writing to Burditt Consultants and/or reported at the next regularly scheduled meeting.

- Pamela Woods will be handling wayfinding and project information signage for park patrons.
- Burditt to email Hou-Scape the permit for the existing renovation.
- Hou-Scape to check with team concerning water shut-off schedule and give Woodlands appropriate notice. Mechanical Building perimeter outline to be determined on 12/14/17 and possible water meter and irrigation boxes relocation.
- General construction schedule and 3-week outlook of work requested from Hou-Scape. Allow for designated response time (for RFI's and Submittals) from design team in schedule.
- Construction fencing to be completed surrounding construction area.
- Pay-app procedure was discussed with understanding of appropriate review time.

Daily Monitoring



- Positive communication with contractor
- Friendly but not friends
- Communication project status with Board/City Management
- **Take LOTS OF PICTURES**
- Other????



Punch Lists



Punch List-

- All consultants
- All impacted staff
- The more eyes the better
- **Take lots of photos**
- Refer back to the plans and standards
- Include all of the little stuff- labeling electrical panels!



Punch List/Acceptance of Work



Substantial Completion

- *“refers to a stage of a construction or building project or a designated portion of the project that is sufficiently complete, in accordance with the construction contract documents, so that the owner may use or occupy the building project or designated portion thereof for the intended purpose.”*
- Warranty clock starts this day!!!



Punch List/Acceptance of Work



#	List	ISSUE	9/19/2018	10-032018
1	Burditt	Missing fire rated plywood on walls for Elec Room 109 at Maintenance Building. All penetrations should be fire caulked/sealed. According to plans only the ceiling is to have fire rated ,walls are to be painted See A1.04	Houscape claims the roof of the room is the only area to be fire rated. Please provide documentation	Houscape to review applicable codes
2	Burditt	Installation of steel boot that was designed to address the cracking at the connection area in timber framing. Houscape is to address this issue immediately without delay.	Accepted	
3	Burditt	Missing windows in doors at rooms 107A and 108B at Maintenance Building	Accepted	
4	Burditt	Missing cool deck coating over entire existing flatwork per finish plan A1.04 and specifications Do not know where you are talking about. All cool deck is in. Addendum #2 : 2.11 The existing slab at the pool house and the new slab surrounding the new pool will receive a cementitious product that provides a non-slip surface. Basis of Design: ACD Acrylic Spray Texture System. Color to be approved by supplier's full range of options. See attachment for product description. Reference website for more information: http://www.advancedconcretedesigns.com/services/acrylic-spray-texture . A.104 shows the entire deck including the existing to be completed.	Accepted	
5	Burditt	Missing fence at Maintenance Building	Accepted	
6	Burditt	Missing plywood header for overhead door per detail14/A4.02 The door company installed the correct header for the overhead door but we will install plywood anyway on Wednesday.	Power Beam Installed. Provide verification from Overhead Garage Door	Need letter/pictures from Overhead
7	Burditt	Confirmation installation of French-drain system at pump pit	Need Pictures	Need pictures
8	Burditt	Confirmation water stop at pump pit	Need Pictures	Need pictures
9	Burditt	Missing concrete polishing system at service desk per detail3/AS1.03 and related keyed note 033.055 This was confusing since the spec was for floors. We will do this on Wednesday	In progress	Concrete is cracking. We will monitor, however Houscape is still responsible
10	Burditt	Gap/Opening in roof above shower areas No clarification provided. Needs to be completed.	Need Pictures	Need pictures/verification

Final Acceptance



- Warranties
- As Built
- Release of Payments
- Release of Bonds
- Issuance of Final Acceptance Letter



Grand Opening!!!!!!



REMEMBER-
**ALWAYS GIVE
THE BOARD
THE CREDIT!!!!**



Thank you!!!!

Chris Nunes, Ph.D., CPRE
Director of Parks and Recreation
The Woodlands Township
2801 Technology Forest Blvd
The Woodlands, Texas 77381
281-210-3906
cnunes@thewoodlandstowship-tx.gov

