5g'U'dfc'YWrick bYf2]Znci 'Wri `X'\UfbYgg'U``h\Y'VYbY hg' of design-build and receive certain guarantees about the performance of your new infrastructure, would you do it?

Enter engineering, procurement, and construction (EPC) - a turnkey model that's gaining momentum as a preferred project delivery method but can require a hefty dose of patience to bX`h\Y`f][\h'9D7`dUfhYf`UbX`bY[ch]UhY`U`a i h'U`mVYbY_VJU`

contract.

EPC F F

The term "EPC" often is used interchangeably, albeit incorrectly, with design-build. The two share similarities, including singlegci fW fYgdcbg]V]`]hră I YX!df]W WtbhfUWgžUbX h Y f]g_g cZ WtghrāgWYXi `YZUbX dYfZcfa UbW"6i h9D7 cZZYfg'Ub YI hYbg]cb cZ services that distinguishes it from other delivery methods and renders it highly applicable to distinct project types, such as Wta d`YI `]bXi ghf]U`z`]ZY gWybWZUbX a Ubi Z.Mi f]b[`Z.Mi]hYg'

Let's review some of the highlights of EPC delivery:

»

teams

YI dYf]YbW'U'\][\``Yj Y`cZ]bHY[fUh]cb'h\fci [\ci h'h\Y project. Field activities can commence much earlier than with other delivery methods, offering owners cost savings and accelerated project schedules. » The EPC f rm is solely responsible for the project.



guarantees that EPC contracts contain. Performance targets and corresponding penalties are often balanced, i.e., multiple dates are established for achieving increasingly higher outcomes i bhj``f\Y` bU`fUf[Yh]ga Yh'

CZhYbždYfZcfa UbW'a i ghVY'gi ghU]bYX'Zcf'U'gdYVJY YX'dYf]cX" Mti 'a i ghVY'UV'Y'hc'a cj Y'hc'Ub'U'hYfbUh]j Y'gi dd`]Yf']Zh\Y' terms of the deal aren't aligned with your company's standards. Counter language and some back-and-forth negotiations are bcfa U`mbYWggUfmZcf'Vch\'dUfh]Yg'hc'VY'gUh]g YX"

If you take the time to research your EPC contractor and carefully negotiate contract terms, you'll be well on your way hc fYU]n]b['h\Y'VYbY hg'cZh\]g'dfYZYffYX'dfc'YVhXY`]j Yfm method.

EPC ... A

Here are two projects that successfully applied EPC methodology, fully engaged each team member, and resulted]b']bWfYUgYX'YZ VJYbWhUbX'X]gHf]Vi h]cb'Zcf'h\Y'dfc'YVWrick bYf'

NOVO NORDISK AND THE TOWN OF CLAYTON, NORTH CAROLINA

At the \$40 million wastewater pretreatment plant for Novo Nordisk and the Town of Clayton, North Carolina, a multiphased EPC delivery approach was used to meet the dfc YVMg %+! a cbh gWYXi Y fYei]fYa Ybh'5g h Y 9D7 fa ž Gannett Fleming performed process design and construction management services, including specifying, procuring, and installing all process and related support equipment. They Wfh] YX h Y dYfZcfa UbW cZh Y Wa d YhYX ZUM [ma]bWi X]b[ei Ubh]mfl ck ŁUbX ei U]mfYZ i YbhX]gWUf[Y fYei]fYa YbhgL'' H Y 9D7 UddfcUW gU YX h]a YžYei Uh]b['hc W]YbhWdghVYbY hg' by integrating design and construction activities into the process.

CHARLOTTE'S WEB

When Charlotte's Web, an industry leader in cannabinoid YI hfUM/jcb'UbX''UVcfUrcfmcdYfUhjcbgžbYYXYX'hc YI dUbX' production capabilities, using an EPC delivery method sped up ZUM/ jhmXY' jj Yfm': cf'h\Y'YI dUbgjcbž; UbbYth: 'Ya]b['dfcj]XYX' Ub']b]hJU''VUg]g'cZXYg][b'hc'U'][b'W]YbhYI dYW/Uhjcbg'k]h\'h\Y' design and construction path. Full engagement of each team (design, construction, client) was critical for early deployment of construction and thorough design.

Beginning with the warehouse phase, the client began operations in this space as the construction of the second d\UgY`cZ Wg`k Ug`i bXYfk UniH\Y`cZ Wg`k YfY`cWi/d]YX`Xi f]b[the construction of the production phase. This approach U`ck YX`h\Y`W]Ybhhc`YI]hh\Y]f`dfYj]ci g`ZJWJ]h]Yg`YUf`]Yfz reducing operating costs. Current good manufacturing practice gdUWgž\UhUfXci g`fcca gžUbX`VWUb`a Ubi ZJMi f]b[`gdUWg`k YfY` all included in the design and construction of the facility. *p*



About the Author

David Broughton is vice president of business development at Gannett Fleming. He can be reached at <u>dbroughton@gfnet.com</u>.

About the Article

This article was written for the online <u>Gannett Fleming Blog</u>. Founded in 1915, <u>Gannett Fleming</u> has been a driving force in shaping infrastructure and]a dfcj]b[Wa a i b]h]Yg]b a cfY h Ub *) Wi bhf]YgžgdYVJU]n]b[]b bUh fU resources, transportation, water, power, and facility-related projects. The company embraces sustainability and innovation in projects and internal activities and achieves results while being responsible stewards of the Ybj]fcba Ybh'5 fYgi `hg Xf]j Yb fa ž; UbbYth: `Ya]b[`]g Wzbg]ghYbhmfUb_YX]b h Y hcd cbY dYfWbhcZYb[]bYYf]b[fa gk cf Xk]XY"

5bmj]Yk gʻUbX cd]b]cbgʻYl dfYggYX]bʻh]gʻUfh]VW a Umcf a UmbchfY YVM h Y views and opinions of the Construction Management Association of America fl/A 55½ 6mdi V]g\]b['h\]gʻd]YWž7A 55]gʻbchYl dfYgg]b['YbXcfgYa YbhcZh Y]bX]j]Xi Uʻžh Y Ufh]VWžcf h Y]f UggcV]Uh]cbžcf[Ub]nUh]cbžcf Vta dUbm

